DOCUMENT RESUME

ED 349 615 CS 507 962

TITLE Proceedings of the Annual Meeting of the Association for Education in Journalism and Mass Communication (75th, Montreal, Quebec, Canada, August 5-8, 1992). Part VIII: Mass Media Effects.

INSTITUTION Association for Education in Journalism and Mass Communication.

PUB DATE Aug 92

NOTE 294p.; For other sections of these proceedings, see CS 507 955-970. For 1991 Proceedings, see ED 340 045. Third paper contains light type.

PUB TYPE Collected Works - Conference Proceedings (021)

EDRS PRICE MF01/PC12 Plus Postage.

DESCRIPTORS *Audience Analysis; Audience Awareness; Communication Research; Foreign Countries; *Mass Media Effects; Mass Media Role; Media Research; Radio; Television

IDENTIFIERS Media Coverage; Uses and Gratifications Research

ABSTRACT

The Mass Media Effects section of the proceedings contains the following eight papers: "The Spiral of Static: A Multivariate Analysis of a Public Opinion Theory Applied to Perception of Radio Station Popularity" (Terry Wedel and Tony Rimmer); "More Than Just Talk: Uses, Gratifications and the Telephone" (Garrett J. O'Keefe and Barbara K. Sulanowski); "Television Coverage of Criminal Trials with Cameras and Microphones: A Controlled Experiment of Audience Effects" (Anna R. Paddon); "Attributional Confidence, Media Use, and Adaptation: Communication and Adaptation Reconsidered" (Wei-Wei Vivian Huang); "The Impact of Competition and Group Ownership on All-News Radio" (Stephen Lacy and Daniel Riffe); "The Framing of an Issue: A Case Study of Gay and Lesbian News Coverage" (Howard Voland); "Testing Opposing Views of the Audience: How the Active Television Viewer Selects Programs" (Guy E. Lometti and Tori Addington); and "Gender and the Effects of Television Violence: A Meta-Analysis" (Haejung Paik). (SR)

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THE ASSOCIATION FOR EDUCATION IN JOURNALISM AND MASS COMMUNICATION

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Part VIII: Mass Media Effects.

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The Spiral of Static:
A Multivariate Analysis of a Public Opinion Theory Applied to Perception of Radio Station Popularity

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Abstract

The Spiral of Static:
A Multivariate Analysis of a Public Opinion Theory
Applied to Perception of Radio Station Popularity

A survey of college students in Mission Viejo, California applies the "spiral of silence" theory to opinion expression involving radio stations. Expression willingness was positively correlated with the respondents' prediction of future station community popularity, perception of current and future station popularity among friends, commitment to a station, and general involvement with radio, but inversely with age. Expression was also related to a "trend" variable, which integrated a perceived change in a station's popularity, the magnitude of change, and the popularity at the beginning and end of that change. Multiple regression identified involvement as the most powerful expression predictor, followed by commitment, the community popularity trend, and current popularity among friends. Among those identified as "hardcores," age and popularity among friends were significant predictors, suggesting a reference group role in hardcore behavior. For non-hardcores, significant predictors were the popularity trend, involvement, and commitment. These results suggest that the spiral of silence model may be applicable to popular culture phenomena.

The Spiral of Static:
A Multivariate Analysis of a Public Opinion Theory
Applied to Perception of Radio Station Popularity

Introduction

Two morning radio announcers on Los Angeles radio station KROQ received considerable local and national publicity after an on-air caller to their program "confessed" to murdering his girlfriend. Several months later, it was revealed that the call was just a hoax -- a publicity stunt planned by the announcers themselves. Once again, the duo and their station were the focus of attention. A program director at a rival station, quoted in the Los Angeles Times, said, "Even if it costs the station hundreds of thousands in (FCC) fees, it's well worth it. Bad publicity is still publicity, and they're getting a ton of it" (Puig, 1991).

Attracting publicity is a major concern for radio stations, and it can be a major expense. Three years ago, it was estimated that the twelve top-rated radio stations in New York City each spent at least $750,000 in advertising during the two major ratings periods (Sholin, 1988). In Los Angeles, Evergreen Broadcasting budgeted more than two-million dollars to advertise its switch from the classically-formatted KFAC to the rock-urban hybrid KKBT (Puig, 1989).

Clearly, stations are willing to go to great lengths to attract the attention of their target audiences, but these efforts could be wasted if they are not reinforced on an interpersonal level among the listeners the stations are hoping to attract. For instance, the listeners of a station with a losing image might be afraid to publicly support it, fearing that they would also be considered "losers." Conversely, a station enjoying a "winning" image might be the recipient of considerable "word of mouth" publicity generated, in large part, by the image itself.

This study explores the mechanisms that might power such an interpersonal dialogue about radio stations. In doing so, it applies to a popular culture phenomenon the "spiral of silence" theory, which is more commonly used to analyze the formation of public opinion regarding controversial political issues.

Review of Literature

The spiral of silence theory is based on the premise that an individual's concern about social isolation can overpower their own personal judgment on a particular issue (Noelle-Neumann, 1974). Noelle-Neumann holds that if a person believes that their stand is not held by others or is perceived to be losing favor, then that person will be less willing to express that opinion. This silence, in turn, leads others who hold that same opinion to also keep quiet, and so on, thus creating the "spiral." If, however, people believe that they hold a popular opinion, or one that is gaining prominence, they will be more willing to express their opinion in public. That, in turn, will induce others to also speak up.

While there are a number of theories that address the formation of public opinion, the spiral of silence is important because it ascribes to the media a significant role in providing individuals with cues about the climate of opinion (Noelle-Neumann, 1984). That would seem to be particularly applicable here since stations not only use their own programming to generate publicity, but also rely on other media to disseminate information, either through advertising or though the coverage of publicity stunts. In addition, the media often publishes the results of radio ratings surveys.

Noelle-Neumann has acknowledged that other researchers have had mixed results in confirming operation of the spiral, but associates these outcomes with the failure to address a number of conditions that she has identified subsequent to the original publication of her theory (Noelle-Neumann, (1985, 1991). Even if these studies do not meet Noelle-Neumann's standards as being true tests of the spiral of silence, they do identify a number of variables that might contribute to an understanding of the opinion expression under study here.

Noelle-Neumann has held that her theory is most likely to operate with issues that have a moral component and are controversial within a social system (Noelle-Neumann, 1985). While these requirements might seem to make it difficult to apply the hypothesis outside of a political context, it may be that certain elements of popular culture could be important and controversial enough to trip the "fear of isolation" mechanism within a particular social environment. Noelle-Neumann herself postulated that the theory could be extended beyond controversial political issues

and be applied to forecasts of, "fashion trends, or the development of social conventions and customs--that is, to all spheres in which the attitude and behavior of the individual is governed by the link between his own convictions and the results of his observation of the social environment" (Noelle-Neumann, 1974).

Even though listening to radio is often considered to be a secondary activity, modern radio programming does encourage involvement by providing a means for listeners to organize their daily routines (Altheide & Snow, 1986). Practically all radio stations provide one or more types of information as a way to attract their target audiences. In addition, radio personalities often facilitate this process by using language designed to establish individual links with listeners, who then develop "intimate relationships" with those personalities (Fletcher, 1987). These features could serve to develop the basic commitment to certain stations that would "sow the seeds of controversy" between those with different station loyalties.

It has been suggested that willingness to express an opinion could be less a function of negative social sanctions than a positive desire for people to be part of a growing wave of popularity; in other words, a "band wagon" effect (Salmon & Kline, 1985). If this is true, then it can still be seen as being consistent with radio programming behavior. Stations often try to equate listening to them as being part of a winning team. A recent article in a trade publication noted that the most popular slogan used by Top 40-type stations is, "Your number-one hit music station" (Radio and Records, 1991).

Whether it's fear of isolation or a desire to jump on the band wagon, it seems reasonable to expect that one's willingness to talk about a radio station is linked to that station's perceived popularity. It's further expected that perceptions of popularity trends will be also associated with expression.

Noelle-Neumann's theory has been criticized for underrating the effects that various reference groups might have on opinion expression. It's been suggested that while Noelle-Neumann applied her theory at the mass society level, the perception of opinion within one's small community or neighborhood might be a more compelling force in the operation of the theory (Glynn & McLeod,

1985). It's argued that studies suggest that what individuals perceive as the climate of opinion is really the dominant opinion in their own reference groups, and further that the fear of isolation that powers the spiral is mitigated by support from reference group members (Glynn & McLeod, 1985; Salmon & Kline, 1985; Kennamer, 1990). And, in a study involving opinions about Radio Marti, it was found that expression is more highly correlated with opinion congruity with friends than with opinion congruity with the community or the country (Matera and Salwen, 1989). In recent writings, Noelle-Neumann has also called for the integration of reference group and group dynamic theories with public opinion theories (Noelle-Neumann, 1991).

In 1964, Mendelsohn observed that radio stations provide "commonly shared experiences" that "can cement the solidarity of various subgroups, (e.g., adolescents, young couples, the aged) within a mass audience" (Mendelsohn, 1979). Since that time, the number of radio stations in the United States has doubled. This has led radio station programmers to drastically narrow their target audiences by developing more than one hundred formats and sub-formats (Keith & Krause, 1989). By attempting to build these loyalties within ever-narrowing subgroups, radio stations could be intensifying the social forces that would fuel the spiral of silence within the target audiences. In more practical terms, the success of a radio station often depends on how well it can target a discrete audience segment, "with unified emotional, life-style, and economic characteristics" (O'Donnell, Hausman, and Benoit, 1989).

If one assumes that friends tend to also share these same characteristics, then it seems appropriate to propose that a person would be more willing to express an opinion about a radio station if the person perceives that the opinion is shared by friends.

Noelle-Neumann identified the 10 to 15 percent of the population who are willing to speak out despite holding an unpopular opinion as "hardcores" and "members of the "avant-garde." She has suggested that hardcores are a minority faction who, "after a lengthy struggle," continue to speak out either because they are now callous to public opinion, or because they are "selecting out" persons or media sources which bolster their positions (Noelle-Neumann, 1974, 1984, 1985). Addressing this phenomenon, both Salmon and Neuwirth (1987), and Rimmer and Howard

(1990), identified issues that might be so morally or socially consuming that people feel compelled to talk about them regardless of public opinion. Alternatively, Noelle-Neumann identifies the avant-garde as those for whom adverse public opinion encourages expression, either because they see themselves as catalysts for change or simply because they relish being different. In either case, Noelle-Neumann says the phenomenon must be accounted for in tests of her model (Noelle-Neumann, 1991).

It is expected then, that the spiral of silence will not operate for these "hardcores." They will instead seek support from reference groups or media sources.

A number of demographic variables have been shown to be associated with differences in expression variables. Noelle-Neumann identified males, younger persons, and the middle and upper class as those most willing to speak out (Noelle-Neumann, 1974). Salmon and Neuwirth (1987), found that younger and more educated subjects were more willing to be interviewed on television, but that demographics were not significantly related to willingness to speak to a stranger.

As noted earlier, the proliferation of radio stations has led programmers to drastically narrow their target audiences. Programmers primarily use different types of music to reach these audience segments. Allegiance to certain types of music is a trait that extends across many age groups (O'Donnell, Hausman, and Benoit, 1989). However, it seems most pronounced among young people. It is in adolescence that individuals learn the "relative salience of music in the culture," and how it "tends to mark each generation with a distinctive musical style" (Fletcher, 1987). It is music that young people use to establish their own identity and to set themselves apart from the rest of society (Chaffee, 1985).

Since music seems to be a important part of the social environment for young people, and since radio stations use music to identify themselves with specific demographic groups, it is expected that age will be a better predictor of opinion expression than other demographic variables.

Noelle-Neumann has acknowledged that there might also be other factors associated with opinion expression besides the climate of opinion. Depending on the circumstances, she says that

the fear of isolation can either be bolstered or diminished by one's "personal disposition and inclination" toward an issue (Noelle-Neumann, 1991). Personal support for Radio Marti was found to be a significant factor in whether non-Cubans were willing to speak out about Radio Marti (Matera & Salwen, 1989). Salmon and Neuwirth (1987) found that one's personal concern and opinion strength on abortion is related to speaking out on the issue. Rimmer and Howard (1990) found that while general interest in politics is a predictor for speaking out but not for action, specific interest in an issue appears to be a predictor for both . Personal factors have also been associated with how radio is used. For instance, an individual's affiliation with peer groups has been shown to be a significant factor in the way that person uses the radio (Dominick, 1986). Therefore, an individual's commitment to a particular station and involvement with radio in general are also expected be factors for how the spiral of silence operates for that person.

In summary, then, the following expectations were addressed in this study:

1) One's willingness to talk about a radio station will be linked to that station's perceived current and future popularity; 2) A person will be more willing to express an opinion about a radio station if the person perceives that the opinion is shared by friends; 3) Age will be a better predictor of expression than other demographics; 4) Involvement with radio and the degree of commitment to a particular station will be associated with expression; 5) Perceived station popularity within reference groups will more likely to predict "hardcore" expression behavior than will perceptions of station popularity in the community.

Methodology

Data were obtained from a questionnaire administered to students in several day and evening lecture classes at Saddleback College in Mission Viejo, California during the month of April, 1991. A total of 142 usable responses were received from the students. The Saddleback Community College District is within both the Los Angeles and Anaheim-Santa Ana metropolitan survey areas, as defined by the Arbitron ratings company.

Subjects were asked to name their favorite radio station, and (on a five point scale) their opinion of that station's popularity amongst their friends, and within the Los Angeles/Orange

County community as a whole. They were also asked to predict the station's popularity amongst their friends and within the community in one year. They were also asked to name the station they thought was the most popular among their friends and within the community as a whole.

Tests of the spiral of silence have generally measured the association between expression willingness and the perceived current and future public opinion on a particular issue. Noelle-Neumann (1989) has criticized much of this scholarship as being too simplistic. To facilitate a richer understanding of the effects associated with a shift in the perceived climate of opinion, a "trend" variable was developed here to incorporate the combined influence that 1) perceived current popularity, 2) predicted future popularity, and 3) the rate of change (if any) between the two, might have on expression willingness.

This variable is the ratio of predicted future popularity to perceived current popularity multiplied by the future popularity:

(future/current) * future = trend

The trend variable produces a value equal to the perceived current (and future) popularity if there is predicted to be no change in popularity. If, however, a change is expected, the strength of the predicted future popularity is either proportionately amplified or weakened by the magnitude of that change. It was expected that this trend measure would be a better indication of expression than the more simple measure of whether a station has or will have a certain level of popularity. Following regression diagnostics, a square-root transformation of this trend variable was utilized in the model because it better met the regression normality assumption.

The "commitment" measure was formed by asking respondents to use a five-point scale to indicate the strength of their current commitment and preference for their favorite station, and how strong they expected that commitment and preference to be in one year. The responses to these four questions, (weighted by their factor loading), were summed to produce a commitment index with a Cronbach's alpha reliability of .92.

The expression variable was developed by presenting the subjects with four different scenarios. First they were asked: "Suppose you're sitting next to a stranger on a local bus who

disagrees with your opinion of your favorite radio station. Would you be willing to enter into a discussion with this person?" The question is an Americanized variation of Noelle-Neumann's scenario involving a stranger on a train and was used by Salmon and Neuwirth (1987) in one of their analyses of the spiral of silence. Next, the subjects were asked: "Suppose a TV reporter is interviewing people on the street about their favorite radio stations. The interview will be shown on a local television station. Would you be willing to be interviewed about your favorite station?" A similar scenario was also used by Salmon and Neuwirth (1987). The third expression question asked the subjects: "Suppose a group of your friends are discussing local radio stations. Would you be willing to give your opinion on your favorite station?" Finally, the subjects were asked: "Suppose you are with a group of your friends. The radio is on, but it is not tuned to your favorite station. Would you be willing to change it to your favorite station?"

The first two expression questions exposed the subjects to members of the general public, the third and fourth exposed the subjects directly to their friends. The first confronted the subjects with a partial questioner who could provide immediate feedback, but would not disseminate the opinion to others. The second scenario presented an impartial questioner who would spread the subject's opinion to the general public, and also perhaps to friends and other members of one's social group who might be watching the newscast. In the third, the subject had to decide whether to verbally express the opinion to friends. The fourth confronted the subject with the question of whether to move beyond words to action.

Subjects were asked to state whether or not they would express an opinion, and were then asked to rate the strength of this willingness on a five-point scale. These two responses were combined to create a ten-point scale for each of the expression variables. Using the responses to these questions, an additive expression index weighted by its variable factor loadings was built. A reliability test of the index produced a Cronbach's alpha of .71.

To measure "radio involvement," an index was built utilizing a five-point semantic differential scale originally adapted from consumer behavior research for gauging issue-involvement with social issues (Nowak & Salmon, 1987). This scale would seem especially appropriate for this

study, which also seeks to place what's normally considered to be a commercial-consumer type phenomenon within the sphere of social-issue research. In this study, subjects were presented with the statement, "Deciding which radio station to listen to is:" and asked to respond using the twelve bipolar scales.

Nine of the twelve bipolar scales loaded on a factor labeled here as "radio involvement," which accounted for 54 percent of the variance in the 12 bipolar attitudes presented to the respondents in the present study. A reliability test of these scales produces a Cronbach's alpha of .92. The "radio involvement" index was constructed as an additive index weighted by the factor loadings of each of the nine bipolar scales.

The respondents were presented with a list of sources of information about local radio stations and were asked to use a five-point scale to indicate how important each of these sources had been in helping to decide which radio stations to listen to. Four of the sources, "television news," "newspaper ads," "newspaper articles," and "television ads," loaded on a factor accounting for 48 percent of the variance in the original nine sources. A additive index weighted by factor loadings was built for these "media sources." It had a Cronbach's alpha reliability of .88. A second factor accounting for 19 percent of the variance included "people you work with," "people you live with," and "friends." A similarly weighted additive index was also built for these "personal sources." It had a Cronbach's alpha reliability of .81.

"Hardcores" were identified as subjects who had a perception of their favorite station's community popularity that was less than the sample mean and an expression willingness that was greater than the sample mean.

A series of questions also dealt with media use and demographic variables.

Results

Overall, the subjects in this survey appear willing to express their opinions on their favorite radio stations in a variety of situations. Table 1 shows the frequencies for each of the expression variables.

TABLE 1
Frequency Results for Expression Variables

		Willing to Express Opinion About Favorite Radio Station		
		Yes	No	
Expression Variables				
Willing to discuss station with friends	(n=141)	95%	5%	100%
Willing to change friend's radio to station	(n=141)	76.1%	23.2%	100%
Willing to be interviewed on TV	(n=141)	80.9%	19.1%	100%
Willing to discuss with stranger on bus	(n=138)	55.8%	44.2%	100%

The subjects showed the most willingness to discuss their favorite station with their friends but appeared slightly reticent about escalating from discussion to deed by switching a radio to that station in the company of those friends. The vast majority also say they're willing to expose their station preference to the general public on television, but are almost evenly divided over whether they would express that same preference to a stranger on a bus who holds a different opinion.

A total of 30 different radio stations were mentioned by the subjects, with 25 of those stations being identified as "favorite" stations. Fields and Schuman (1976) identified a "looking-glass perception," which is the tendency for people to think that others hold the same opinion that they do. In this study, 48 percent believe their favorite station is the most popular station among their friends, while only 20% of the subjects believe that their favorite station is also the most popular station in the overall community. While these numbers might appear to be low, it should be remembered that even the most popular station in the Los Angeles area during this study (KOST), had an average of only six percent of the radio listeners tuned to it at any given time. Only one subject who identified KOST as their favorite station also believed that it was the most popular station. Several studies have attempted to measure factors involved when people incorrectly believe that they are in the majority, and vice versa, (the phenomenon of pluralistic ignorance)(O'Gorman & Garry, 1976; Taylor, 1982; Rimmer & Howard, 1990). While there were signs of pluralistic ignorance here, one confounding factor in measurements involving radio

stations is that there isn't a majority opinion in the overall community. Further, it is very difficult to accurately measure popularity within groups of friends.

Spiral of Silence Operation

The bivariate correlations involving perceived and predicted station popularity, commitment to a station, involvement with radio, age, education, and gender with the expression variables are shown in Table 2.

Table 2

Pearson's Correlations of Perceived Station Popularity, Commitment, Involvement, and Demographics with Opinion Expression

	Stranger on Bus	TV Interview	Discuss with Friend	Change Radio	Combined Expression
Current Popularity in Community	.02	.11	.08	.13	.12
Future Community Popularity	.13	.20*	.19*	.21*	.25**
Community Popularity Trend #	.18*	.18*	.22**	.18*	.25**
Current Popularity With Friends	.15	.35***	.21*	.20*	.34***
Future Popularity With Friends	.21*	.33***	.30***	.30***	.39***
Commitment	.25**	.43***	.44***	.44***	.52***
Involvement	.41***	.37***	.46***	.39***	.56***
Age	-.14	-.17	-.13	-.14	-.19*
Education	.10	-.07	.01	-.12	-.01
Gender	.04	.06	-.07	-.02	.02

* - Signif. < .05 ** - Signif. < .01 *** - Signif. < .001 (2-tailed)

= Square-root transform of: (Perceived Current Popularity in Community/Expected Future Community Popularity) x Expected Future Popularity in Community .

The expression variables are: 1) willingness to discuss the station with a stranger on a bus; 2) willingness to be interviewed about the station on television; 3) willingness to discuss the station

with a friend; 4) willingness to change a radio to one's favorite station in the presence of friends; and 5) the weighted additive index of the first four variables.

Station Popularity in the Community

It was expected that one's willingness to talk about a radio station would be linked to that station's perceived current and future popularity. The associations between the perceived current popularity of the station in the community and the expression variables are in the predicted direction, but are not statistically significant. The "current" element of the hypothesis, often viewed as the basic spiral of silence model, was not supported.

Relationships between the expression variables and the expected popularity of the station in one year are also in the predicted direction, and are statistically significant for all but the bus discussion variable. This provides some support for the simple "future" element of the first hypothesis.

A community popularity trend variable was constructed to explore what happened when an individual perceived there would be a change in popularity. It incorporated the perceived current and future levels of popularity with the magnitude of the change by multiplying the ratio of future popularity to current popularity by the expected future popularity. This trend was significantly associated with all of the expression variables in the predicted direction.

Station Popularity Among Friends

It was expected that a person would be more willing to express an opinion about a radio station if the person perceived that the opinion was shared by friends. Perceived station popularity among friends correlated with all of the expression variables except talking to a stranger on a bus. The largest association was with the willingness to express an opinion during a television interview. The expected popularity of a station with one's friends in one year was significantly associated with all of the expression measures in the predicted direction.

Demographic Variables

It was predicted that age would be a better spiral of silence predictor than other demographics. Age was found to be the only demographic variable associated with expression willingness. While significant associations were not found for the individual expression variables, age was found to be inversely related to the expression index. This is consistent with the expectations here, as well as the findings of Noelle-Neumann (1974) and Rimmer and Howard (1990), who found that willingness to express an opinion decreased as the respondents' ages increased.

The Role of Commitment and Involvement

Involvement with radio in general and the degree of commitment to a particular station were predicted to be associated with expression. Significant associations were found between involvement and all of the expression variables. Commitment was measured by combining questions involving preference and commitment. Significant associations were found between this measure and all of the expression variables.

Media Use and Radio Information Sources

While not part of the working hypotheses in this study, the respondents' use of various types of mass media, as well as the relative importance that respondents placed on different sources of radio station information was assessed. No significant associations were found between any of these media and information source variables and any of the expression variables.

A Multivariate Test of the Spiral of Silence

A multivariate analysis was performed to assess the relative contributions the independent variables had on the combined opinion expression measure. The results shown in Table 3 indicate that four of the independent variables considered here explained 46 percent of the observed variation in the willingness to express an opinion about one's favorite radio station.

The two most powerful predictors in the model are radio involvement and commitment to a radio station, while the trend of community opinion (operationalized as the square-root transform) and the perceived current popularity of a station with friends share a less powerful but still significant contribution to expression willingness.

Table 3
Multiple Regression Results for Willingness to Express Opinions on Radio Stations

Independent Variables	Beta	Probability T
Involvement	.35	.000
Commitment	.31	.000
Station Community Popularity Trend #	.17	.020
Current Station Popularity Amongst Friends	.17	.020
Adjusted R Square .46		

= Square-root transform of: (Perceived Current Popularity in Community/Expected Future Community Popularity) x Expected Future Popularity in Community .

This suggests that while the climate of public opinion does have a role in the willingness to speak out about a radio station, its influence is mediated by reference groups, and could be overpowered by the personal qualities of an individual.

"Hardcore" Expression Behavior

It was expected that reference group popularity would be more likely than community popularity to be associated with "hardcore" expression behavior. Hardcores have been identified by Noelle-Neumann (1985) as the 10 to 15 percent of the population for whom the threat of isolation is no longer meaningful. In this study, hardcores were identified as those who had a higher than average willingness to speak out yet a lower than average perception of their station's popularity in the community. Of the 142 subjects in this study, 26 (18 percent) were identified as hardcores. A multiple regression was run for both hardcores and non-hardcores and the results are shown together for comparison in Table 4. For hardcores, only respondents' age and their perception of their station's current popularity with friends were significant predictors. While age was noted earlier as being inversely related to expression for the entire sample, age was found to be a positive predictor for hardcores.

Table 4
Multiple Regression Results for Willingness to Express Opinions on Radio Stations For Hardcores and Non-Hardcores

Hardcores			Non-Hardcores		
Independent Variables	Beta	Probability T	Independent Variables	Beta	Probability T
Age	.55	.013	Station Community Popularity Trend #	.35	.000
Current Station Popularity Amongst Friends	.45	.003	Involvement	.33	.000
			Commitment	.31	.020
Adjusted R Square .37			Adjusted R Square .51		

= Square-root transform of: (Perceived Current Popularity in Community/Expected Future Community Popularity) x Expected Future Popularity in Community .

For non-hardcores, the most powerful predictor for expression was the perceived trend of community popularity for a station, followed by involvement and station commitment. These findings suggest that by removing hardcores from the sample, the direct role of a primary reference group, (friends), is substantially reduced, and popular opinion becomes a more powerful predictor for expression than either of the two personal qualities.

The relatively small number of hardcores hampers effective statistical analysis of these hardcores, however, a "qualitative" analysis involving the favorite stations of the hardcores and non-hardcores was performed.

A total of 11 different stations were identified as being the favorites of the hardcores in this study. Of those, seven stations clearly fell into four format categories accounting for more than 66 percent of the hardcores' preferences. Comparisons between hardcores and non-hardcores for these four categories are shown in Table 5.

Chi-square tests compared the percentage of the hardcores who chose each type of station with the percentage of non-hardcores who chose those stations and found significant differences for all but the alternative rock stations.

Hard rock stations are a relatively new phenomenon. They appeal to young males and often

TABLE 5
Comparison of Favorite Stations of Hardcores with Non-hardcores

	Percentage of All Favorite Stations Identified by: Hardcores	Non-Hardcores	Chi-Square Probability
Favorite Stations Categories			
Hard Rock (KNAC, KQLZ)	23.1%	8.9%	p<.05
Alternative Rock (KROQ, XTRA-FM)	23.1%	24.1%	n.s.
Religious Stations (KYMS, KWVE*)	11.5%	1.8%	p<.05
Public Stations (KSBR,KCRW,KLON*)	11.5%	.9%	p<.01
*Favorites of non-hardcores only			

portray themselves as "outsiders," (KQLZ calls itself "Pirate Radio"). Listeners of these stations are probably not calloused from a long struggle (Noelle-Neumann, 1974), but rather can be categorized as those who relish bucking the tide of public opinion. These might be seen as Noelle-Neumann's "avant-garde."

Alternative rock stations also often portray themselves as being outside the mainstream, but in fact have been in existence for many years, (KROQ has been on the air for nearly 20 years), and generally do well in the ratings. It could be that a substantial part of the audience for these stations now believes that they are part of the mainstream. Of those who don't, the older listeners may have become hardcores after supporting them for so many years, while newer listeners may be part of the avant-garde.

Listeners of religious and public stations might also enjoy being "set apart" from the general listening public, but unlike alternative rock stations, there is probably little likelihood that these stations will become among the most popular within a community. Their relatively few listeners are likely to be hardcore in their behavior.

This analysis suggests that hardcore listeners might be distinguishable by not only their expression willingness, but also by their preference of radio stations.

Conclusions

This study applied the spiral of silence, a theory commonly used to analyze associations between the mass media, opinion congruency, and opinion expression regarding controversial political issues, to opinion expression involving radio stations, a phenomenon of popular culture.

The survey examined the relationships between a person's willingness to speak out about their favorite radio station and: their perception of the popularity of their favorite station both within the community and among their friends; demographics; the strength of their commitment to a station; their general radio involvement; and demographics. In addition, these relationships were explored for those identified as hardcores and non-hardcores.

The "classic" measure of the spiral of silence, a link between opinion expression and congruency with the perceived current climate of public opinion, was not supported in this study under either bivariate or multivariate testing. General support was found, however, for associations between the willingness to speak up and the expected future popularity of a station, as well as with the "trend" of popularity.

This "trend" measure, the product of the expected future popularity of a station and the ratio of future to current popularity, was developed to explore whether integrating the perceived change in a station's popularity, the magnitude of that change, and the popularity at the beginning and end of that change, produced a better predictor of expression than the simple perception of a station's current or future popularity. Noelle-Neumann has asserted that if individuals believe that the trend of opinion is in their favor, "the risk of isolation (because of current public opinion) is of little significance." The findings here support that contention. The trend was a significant predictor of opinion expression for the sample as a whole, and was the most powerful predictor for the 82% of the sample identified as "non-hardcores." The word, "trend," is often associated with popular culture phenomena such as fashion and music. The trend measure, (or some variation of it), might be used in future studies to gauge opinion expression associated with these phenomena, particularly in a case such as the present study, where simply analyzing current public opinion might lead one to conclude that the issue doesn't present a social climate that is threatening enough to compel silence.

The significant contribution that the perceived opinion of friends makes in predicting expression suggests an important role for reference groups for at least some of the respondents. It is notable that while it is the dynamic trend of community opinion that contributes to expression, it

is the static current opinion of friends that is the other significant opinion-related predictor. Furthermore, the two variables are nearly equal in their contribution to the model for the entire sample. The TV interview scenario produces the highest bivariate association with current friends popularity (r=.35), supporting the contention that reference groups attenuate the threat from the climate of opinion by bolstering confidence in one's opinion (Salmon and Kline, 1985; Kennamer, 1990). It has been argued, however, that the disposition of reference groups themselves are a consequence of the climate of opinion, and that their influence on individuals is merely an indirect reflection of that climate (Donsbach, 1989). This issue of whether it is the overall climate of opinion or the opinion of reference groups that acts as the primary mechanism for expression willingness, would be well suited to a path analytical approach in a future study.

As was the case in previous studies of the spiral of silence, age was found to be associated with differences in the willingness to express an opinion. The differences associated with age were not as pronounced as expected, particularly as a predictor for expression for the entire sample and the non-hardcores. One possible explanation for this is that while the review of existing literature leads one to believe that the strongest associations for cultural "issues" such as radio might be found at a younger age, the sample did not include anyone below the age of 18. Age was found to be the most powerful predictor for hardcores.

As predicted, involvement appears to play a major role in the willingness of an individual to express an opinion. Involvement was the most powerful predictor for expression for the entire sample and a significant predictor for non-hardcores. The radio involvement index in this study was based on an index modified from consumer research in order to measure involvement with social issues. Nowak and Salmon (1987) defined "involvement" within the theoretical basis for their index as the, "importance and/or interest evoked by a stimulus." In the present study, the stimulus was deciding which station to listen to. It seems reasonable to expect that someone who has invested interest or involvement in choosing a station would feel more confident about expressing an opinion on it. This implies that the "fear of ignorance" suggested by Salmon and Neuwirth (1987) might be operating here. Future studies could explore the link between radio

involvement and knowledge about radio, and whether there is a difference when these factors are applied to specific stations or radio in general.

Strength of commitment, as measured here, was station specific. It was also found to be a significant predictor for expression for the entire sample and for non-hardcores. Salmon and Neuwirth (1987) suggested that similar findings involving the issue of abortion indicate that expression may be driven by a "positive" mechanism that encourages individuals to want to speak out, as opposed to the "negative" operation of the spiral of silence. Noelle-Neumann does acknowledge that this positive force exists, but contends that it acts together with the fear of isolation to encourage or discourage expression. The findings of this study support Noelle-Neumann's assertion.

As expected, one's perception of the opinions of friends was a significant predictor for the expression behavior of those identified in this study as "hardcores." It seems reasonable to expect that when individuals become callous to public opinion, they depend more on their primary reference groups for support. The finding that age was the most powerful predictor for this group runs counter to the bivariate finding for the entire sample, as well as findings of previous studies that age is inversely associated with expression. It's possible that age for this group is related to the "lengthy struggle" that Noelle-Neumann asserts makes individuals callous to public opinion.

It might seem surprising that the strength of opinion about a station was not a contributor to hardcore expression behavior. The reasons for this may be imbedded in the process of becoming a hardcore. Perhaps an individual evolves through increasing levels of personal opinion strength until the level of this commitment is simply no longer a factor in expression. This is another area where a future study using a path analysis would be valuable.

Future research should continue to study the applicability of various expression variables in connection with public opinion. Noelle-Neumann has questioned the appropriateness of measures of the type used here, believing that scenarios involving friends in social situations introduce influences that complicate the study of the theory. These scenarios were used here because of the social emphasis often associated with radio use. Further, it's argued here that any expression

measure may have complicating factors that should be controlled for, depending on the cultural or social environment in which it's used. For instance, analyzing results from Noelle-Neumann's classic train/bus discussion scenario may be complicated in an area such as Southern California by the fact that most residents don't normally use these forms of public transportation. For these residents discussing anything with a stranger on a bus might seem to be intimidating.

Future research should explore differences in the parlance of the expression variables. In this study, subjects were asked whether they would be willing to speak out in various situations, but that doesn't necessarily indicate the probability that they would. Neuwirth (1988) found indications that there are differences in expression measures between "liking" to speak out and the probability of speaking out, and suggests that there could be several expression measures, indicating different emotional responses ranging from pleasure to moral obligation. This has important practical applications for radio programmers, who probably prefer the opinion expression by their listeners to go beyond simple willingness to something closer to evangelism. It might be that the nearly one-third of all "top-40" stations which proclaim themselves, "The number one hit music station" are simply trying to "prime" this public opinion "pump."

The results of this study suggest that the spiral of silence model is applicable to the study of opinion expression about radio stations. In doing so, they also provide support for Noelle-Neumann's assertion that the theory can be generalized to popular culture phenomena as well as other contexts, "in which the attitude and behavior of the individual is governed by the link between his own convictions and the results of his observation of the social environment" (Noelle-Neumann, 1974).

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MORE THAN JUST TALK:

USES, GRATIFICATIONS AND THE TELEPHONE

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Submitted to
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Annual Conference Montreal August 1992

Note: This research was supported by a grant from the Ameritech Foundation.

ABSTRACT

MORE THAN JUST TALK:
USES, GRATIFICATIONS AND THE TELEPHONE

Little research attention has been given to the role of the telephone as a mixed mass media-interpersonal communication channel. This study examines gratifications sought from telephones, behavioral patterns of their use, and individual variation in those. Findings, based on a probability survey of 597 Midwestern adults, delineate social, entertainment, and instrumental dimensions of telephone use. These vary considerably across certain demographics, and are quite predictive of particular telephone use behaviors. Results are considered in the context of media and interpersonal uses-gratifications perspectives.

MORE THAN JUST TALK:

USES, GRATIFICATIONS AND THE TELEPHONE

The current revolution in telephone applications and uses calls for more comprehensive, theoretically-based analyses of its place in and impact on contemporary society. Surprisingly, until quite recently virtually no empirically based research had been conducted on how people use telephones, nor of the role the technology likely plays in social and informational communication processes.

As Williams et al (1985) note, most of the previous literature deals with the effects of the telephone on societal development (e.g., Aronson, 1971; Pool, 1983), on the physical aspects of communities and nations, and on the economics of communication technology. The few behavioral studies that did exist centered on market implications of how often households made either local measured service or long distance calls, and tended to find that larger households made more calls, with some mixed demographic differences (LaRose and Mettler, 1990).

However, a series of recent studies have begun to close the gap, particularly in terms of individual motivations or reasons people have for using the phone. This study extends that inquiry by applying current uses-gratifications models to people's patterns of telephone usage.

Previous research

Cathcart and Gumpert (1986) categorize telephony as interpersonal mediated communication, or "any person-to-person interaction where a medium has been interposed to transcend the limitations of time and space" (p. 30, 1986). The medium chosen (e.g., letters, electronic mail, as well as phones and CB radio) constrains the quantity and quality of information transmitted, and can shape the relationship of the participants as well, the authors note. Telephones restrict communication to the auditory channel; but they also allow privacy and intimacy across spatial boundaries. Speed is a key advantage as well, as is the convenience of accessing interaction from home, office, or, increasingly, wherever one happens to be. Surprisingly, however, the few observations that have been made comparing face-to-face contact with telephony show only slight differences in conversational modes (Reid, 1977). Lack of additional sensory stimuli (or "cuelessness") may also lead to greater task-orientation, less spontaneity, and fewer compromise outcomes in telephone communication (Rutter, 1987).

Extending the mediated interpersonal communication theme somewhat further, LaRose and Atkin (1989) consider the contemporary telephone as moving toward a part-mass and part-interpersonal communication technology. They relate the roots of telephony in its transmittal of on-call entertainment and information services in the early part of this century (see also

Pool, 1973; Brooks, 1976) to the current watershed of audiotex services aided by extensive regulatory and tariff changes.

Telephone use motives

As for what motivates people to use telephones, Keller (1977) and Noble (1987) offer a general distinction between intrinsic and instrumental telephone uses. The former relates more to the "psychological neighborhood" of social support the device offers (Aronson, 1971); the latter addresses phoning as a way of getting things done, as in shopping, dealing with emergencies, scheduling events and the like. The immediacy or time-saving "imminent connectedness" telephony offers (Wurtzel and Turner, 1977) would seem to especially facilitate instrumentality. In a convenience sample of 100 Australian adults, Noble found that domestic intrinsic calls made and received outnumbered instrumental ones, and that intrinsic use was higher among women and persons more concerned about family contact. Respondents also generally agreed with statements that having a telephone made them feel less lonely, more secure, and more easily in contact with family, as well as having calls from people they didn't want to talk with. No relation was found between anxiety levels and telephone use.

Using a similar data set, Noble (1989) qualitatively analyzed open-end responses to questions about why people used the phone in both home and office situations, and arrived at the following categories of reasons: (1) convenience; (2) time saving; (3) ongoing contact with family and friends; (4) gossip; (5)

overcoming loneliness and isolation; (6) overcoming distances; (7) saying things people would rather not say face-to-face; (8) information access without emotional interplay; (9) avoiding small talk (as in face-to-face); (10) easier venting of feelings; and (11) a sense of security. Respondents also indicated disliking the phone because of expense, nuisance calls, inconvenient calls, its impersonal nature, and various frustrations including busy signals, being cut off, etc. Noble (1987) found indications that respondents may find it easier to tell "white lies" over the phone, but that they did not think it easily lent itself to expressing feelings, nor was it preferable to unmediated interactions for delivering good or bad news.

Williams et al (1985) found support for similar intrinsic vs. instrumental components, as well as others, in a pretest of a list of potential telephone uses on 130 university undergraduates. Items cited as "likely" or "very likely" by half or more of the group included: "to summon help or assistance;" "to deliver bad news quickly;" "to relieve boredom," "to tell someone you love them or miss them;" "to make an appointment;" "to stay in touch with a friend;" "to maintain a business relationship;" and "to communicate with someone out of state." The authors (and Dordick, 1989) also make a case for a "fun" or entertainment function of the telephone, as it is often used by many adolescents, for example.

More methodologically sophisticated findings on reasons for using the phone come from a probability sample of 663 residents

of Lyons, France (Claisse and Rowe, 1988). This study used questionnaire interviews, a relationship network analysis, and telephone call logbooks to describe the content and purposes of 7,252 calls, domestic and business-related. The analyses suggested three primary types of telephone "actions": (1) managing (38% of calls), including making appointments and the like; (2) informing (38%), or getting or giving information; and (3) discussing (27%), or conversing to basically exchange news. Subsequent analyses led the authors to conclude eight main reasons for telephoning. Six include informing and managing about issues related to one's working life, social life, and private life (mainly family-oriented); The other two are discussion or conversation as related to social and to private life. While these analyses of calls may be too structured to allow for likely overlapping of purposes within calls, they provide surer empirical evidence of the range of possibilities across intrinsic and instrumental dimensions. Their overall results suggested that functional uses of the phone were more prevalent than social or convivial ones.

The intrinsic dimension of telephone use motivations may consist of a broader range of items than the instrumental dimension. Noble (1987) found that only four variables significantly discriminated between heavy and light instrumental users while eight variables distinguished heavy from light intrinsic users. This, he concludes, "suggests that the motives

and consequences of intrinsic phone use are more complex than instrumental use."

Perhaps the finding that women, more often than men, use the phone for intrinsic purposes (Noble, 1987; Claisse & Rowe, 1987; LaRose & Mettler, 1990) merits some attention as a means of further refining the intrinsic dimension. Maddox (1977) cites a 1970 American Telephone and Telegraph Company study associating women's use of the telephone with three factors: fear of crime in the streets, confinement to the home by small children, and greater distances separating women from family and friends. In her 1985 case study of women and the telephone in Prospect, Illinois, Rakow (1987) confirmed that the phone may compensate women for their restricted mobility and spatial limitations separating them from family and friends. She observes, however, that women's telephone talk is work associated with their roles as care-givers in meeting the needs of family members, and in building and maintaining relationships that strengthen family and community ties. As such the intrinsic dimension can be seen as containing an instrumental component. Claisse and Rowe (1987) speculate that women phone twice as often as men, in part, because of their "central place in the management of daily life." In a 1988 national study of women's telephone usage in Australia, qualitative analysis revealed that the telephone was "widely perceived by respondents as contributing to their well-being, sense of community, autonomy and health" (Moyal, 1989). Moyal notes that the phone has enabled single mothers to earn an income

while keeping track of their children at home thus implying a control function. She also indicated that the telephone has helped elderly women maintain their autonomy and independence well into old age.

In a more complete and generalizable set of findings, LaRose and Mettler (1990) identified four factors of telephone motivations, including a negative telephone apprehension dimension. Their sample consisted of 649 adults chosen by a random digit dialing technique in two medium-sized cities in Mid Atlantic states. The highest rated factor centered upon social uses (e.g., "I would use the phone to stay in touch with friends."), followed by instrumental uses (e.g., "I would use the phone to make a travel reservation.") and enjoyment or stimulation (e.g., "I talk on the phone because it's fun;" "I use the phone to relieve boredom."). Greater telephone enjoyment was found among women, the lesser educated, lower income earners, older persons, unemployed and blue collar workers, and the unmarried. Demographics were not reported for the other factors.

Telephone Use Behaviors

Measurement of such baseline telephone use patterns as time spent calling, frequency of calls, and who people talk with has been quite scarce. Wurtzel and Turner's opportunistic 1975 study of 600 New Yorkers following a phone blackout found just under half of them making four to six calls a day on average, with about two thirds spending less than 30 minutes daily on the home

phone. Those who made more calls received more, and age, sex and occupation seemed unrelated to phone use.

The above-noted Claisse and Rowe (1988) study of French telephony found 40% of household calls to be with family members, and 35% with friends and acquaintances; however, most of these calls tended to be aimed at "managing" rather than at affective interaction. Calls averaged under five minutes each, with individuals typically making about nine calls per week. However, variation was considerable: 17% of individuals were involved in one-third of the calls, and two-thirds of the sample accounted for only one-third of the calls. People living alone called twice as much as others. Women used the phone at twice the rate of men, even controlling for household size, parenthood, occupation, and age. Greater employment status resulted in more calls.

In their Mid-Atlantic states sample, LaRose and Mettler (1990) found an average of 33 minutes daily telephone use. Time spent on calls was best predicted by the telephone enjoyment gratification dimension, and social uses and apprehension (negative) were significant indicators as well. Interestingly, certain media exposure variables predicted calling time, including time spent with radio and local television news, and movie attendance. Overall daily television viewing was a negative, although somewhat weak, indicator. As in the French study, single people and women spent more time phoning.

In related studies, LaRose and Mettler (1989) found residents of rural and nonrural communities to be quite similar in their

use of such newer telephone technologies as audiotex, answering machines and modems. More generally, use of interactive telephone technologies, including audiotex and "900" lines, was found to be higher among upper income and unmarried people, and among those more willing to use phones for a variety of transactional purposes (LaRose and Bates, 1989).

Rationale

We concur with LaRose and Atkin that it is now productive to regard the telephone as at the least an emergent mass medium, poised to compete with other electronic media in the marketplace for informational and entertainment services. At the same time, telephones obviously retain their highly interpersonal attributes, and social uses are likely to prevail for some time. This duality makes telephony an attractive field for exploring associations between interpersonal and mediated communication motives, uses and gratifications. As Rubin and Rubin (1985) note in their call for a research agenda on the interface of personal and mediated communication, interpersonal channels should be considered as equals with media channels in their potential for satisfying various social and psychological needs.

Well-documented categories of media motives or gratifications sought generally include surveillance, information gain, arousal, escape/relaxation, parasocial interaction and interpersonal utility. (For overviews of seemingly countless studies involving these, see, for example, Palmgreen et al, 1985; Blumler, 1985; Dobos and Dimmick, 1988). The study of interpersonal

gratifications is a much more recent undertaking, the seminal exploratory study being Rubin, Perse and Barbato (1988). Using convenience samples of respondents, the authors narrowed an extensive list of potential interpersonal communication motives down to 28, factoring those into six dimensions: pleasure, affection, inclusion, escape, relaxation, and control.

Expressing affection and control appear to be the only two interpersonal factors clearly non-extendable to media situations. Inclusion may be partially so, although it shares at least some of the characteristics of involvement. The media motive of parasocial interaction, on the other hand, may be the only one not directly translatable to the telephone (although recorded telephone services could serve such a function.) Similarly, interpersonal utility doesn't quite translate to the telephone, except in the sense that people often talk to people to have things to talk to other people about (a dimension not included in Rubin et al.).

Drawing more directly from previous work on the telephone per se, more instrumentally based categories would seem to include surveillance, information gain, purchasing goods or services, and scheduling. More intrinsic ones include arousal, escape or relaxation, and entertainment. Certain social uses appear to have both intrinsic and instrumental sides, including demonstrating affection to others, gaining a sense of inclusion or involvement with others, and exhibiting personal or social control.

Recasting two of the research questions Rubin and Rubin (1985) raised, we can ask: (1) Which needs are best met by the telephone, or, what kinds of gratifications are most likely to be sought through telephone use? (2) How are these gratifications related to ones more typically sought through mass media vs. personal channels? (3) How do individuals differ in the nature of gratifications sought from the telephone? and (4) How predictive are these gratifications of particular telephone use behaviors?

METHODS

The study was conducted as part of a larger effort concerned with how individuals use the telephone to obtain information about a range of services. Telephone interviews were conducted from March to May 1991 with a random-digit-dial probability sample of 597 adult residents of Milwaukee, Kenosha and Racine counties in Wisconsin. Response rate was 52 percent, based on a conservative formula including all working residential phones in the denominator. Interviews averaged 15 minutes. In addition to the telephone gratification and use items to be discussed below, respondents were asked about their use of certain phone-related information technologies and other information-seeking and media habits. The questionnaire specified personal phone use as opposed to work-related, business calls.

Gratification measures

Our goal was to construct telephone motive items that would reflect a healthy mix of media and interpersonally sought

gratifications, as well as fit with past research on the telephone. We focused exclusively on personal as opposed to work or professionally related telephone use, assuming that domain to have distinct and often normative patterns of conduct. From the above literature, we developed a list of nearly 80 such items across the gratification categories of surveillance, information gain, arousal, escape/relaxation, affection, inclusion, personal/social control, and purchasing and scheduling. We chose the question format of reading to respondents what was described as "a list of some reasons people give for using the telephone. On a scale that goes from one to five, where one means the reason does not apply to you at all and five means it applies to you a great deal, please tell me what number stands for how much each reason applies to you."

Allowing for compromises for the length and logistic requirements of telephone interviewing, 23 items survived pretesting sessions. Other items were eliminated primarily on the basis of their being called too repetitive, or ambiguous, in pretests. Mean scores were computed for each item (Table 1).

Having a phone on hand for emergencies appears to be a near-universally accepted function of subscribership. Apart from that, however, more social reasons dominated, followed by instrumental ones. Clearly the most popular category had to do with demonstrating affection to others by keeping in touch, sharing, and expressing feelings of caring. Surveillance of others scores equally high as an individual item. Feeling involved with, and

advising or being advised by others, also scored relatively high.

Instrumental items viewed as more applicable by the respondents were related to purchasing and scheduling, and getting information quickly. Wholly intrinsic reasons relating to arousal and escape faired less well across the sample, as did companionship.

Factor analyses

The above dimensions were chosen to descriptively reflect media and interpersonal motives from the previous literature. The next step was to analytically determine potential groupings of the items across respondents. Concerns have been voiced over the appropriateness of various factor analytic techniques for multivariate analyses in general (e.g., MacCallum, 1983; Wilkinson, 1989) and communication gratification item analysis in particular (Dobos and Dimmick, 1988). In a preliminary report (O'Keefe and Sulanowski, 1991), we detailed the more extensive analytic procedures used to limit such concern, including comparisons of common factors analysis, principal axes factoring, and principal components solutions. All yielded quite similar factor structures.

The method with the greatest utility and congruence of findings was the SPSS/PC+ V4.0 principal components solution, which contained four factors with eigenvalues greater than 1.0 (as did the other routines), explaining 55% of total variance. Oblique (oblimin) rotation was used to better account for expected correlations among factors.

The first factor, sociability, had an eigenvalue of 6.93 and explained 30% of the total variance. The affection items load highest on this factor, followed by surveillance and those elements of inclusion and control related to social interaction (Table 2). This social dimension seems more instrumentally based than intrinsic. Items in it averaged the highest mean scores across respondents. The standardized Cronbach's alpha for the item set was .85.

The second factor, entertainment (eigenvalue = 2.81, 12% of variance), is clearly intrinsic in mixing arousal, escape/relaxation, and liking to talk and companionship from the inclusion category. Items on this factor generally had the lowest mean scores. The standardized alpha was .88.

Acquisition is the third factor (eigenvalue = 1.86, 8% of variance), and it discriminates in the direction of acquiring or purchasing as opposed to scheduling. Information gain is largely subsumed under this dimension, which could appropriately be labeled "shopping," whether for goods, services, or information. It ranked third in item mean scores, with a standardized alpha of .64.

Last was time management (eigenvalue = 1.1, 5% of variance), including elements of scheduling as well as control. Organizing, making plans, and accessing information quickly ranked nearly as high as social motives in applicability to respondents. The standardized alpha was .69.

The sociability and entertainment factors are similar to those reported by LaRose and Mettler (1990). However, our instrumental uses split between acquisition and time management. There is little indication in these analyses of a distinction between mediated vs. interpersonal communication gratifications in telephone use. Rather, elements of both are interspersed within various factors.

Telephone behavior measures

Respondents were asked how many "non-work-related calls" they made on a typically weekday "from their home, workplace, or any place else," and how many they made over a typical weekend, Saturday morning through Sunday night. They were asked the same questions for number of calls received, and for how many minutes or hours they spent on the phone.

They were also asked how often in a typical week they spoke on the phone with: (a) someone who lives in their household; (b) friends or relatives who live less than one hour's drive away; (c) friends or relatives who live more than an hour's drive away; (d) people they wanted information from, such as store clerks, health care professionals and so on; and (e) people who wanted information from them, such as poll takers, people selling something, and so on. Monthly use of "800" free service and "900" pay lines were also assessed, along with use of audiotex recorded information services.

FINDINGS

With respect to individual differences in telephone gratification seeking, women and younger persons generally scored higher across all items (Table 3). Exceptions were that using the phone for acquiring information and knowledge, and for making plans, were not tied to gender. Also, older adults scored somewhat higher on demonstrating affection via the phone and having one on hand for emergencies. Younger respondents clearly more used phones for time management, for information about products and services, and for learning about how to do things.

An interesting age-related split occurs on the sociability dimension, with older respondents indicating greater affection demonstration while younger ones leaned more toward surveillance (keeping up-to-date; finding out what's going on) and informing and advising others.

More educated persons generally used the phone more for sociability, acquisition and time management. Less educated were more likely to consider the phone useful for emergencies. Employed individuals and those with higher incomes used it more for acquisition and time management, but less for more intrinsic entertainment-oriented reasons. On the sociability dimensions, employed people found the phone useful for staying in touch with people, and informing and advising others. Household size was less predictive of gratifications, except that persons in smaller households gave greater weight to keeping up-to-date and companionship; those in larger households were more apt to cite

informing or advising others (perhaps children) and getting information about products and services.

Regression analysis using the factor score arrays as dependent variables indicate more clearly that gender and age are the strongest indicators of telephone sociability, and to a slightly lesser extent entertainment (Table 4). Less likely to be employed and low income persons also use phones more for entertainment, with low cost per call probably a consideration. Upper socioeconomic lifestyles seem directly tied to acquisition uses of the phone, while youth is the overriding predictor of time management.

Gratifications and behaviors

Time spent on the phone was slightly higher than reported in previous studies, averaging 45 minutes on weekdays and 65 minutes over weekends, for a total mean of 290 minutes over the full week (Table 5). Respondents made an average of approximately six calls per weekday, and received about five. They made and received just under six calls per weekend on average. However, the percentages in Table 6 suggest considerable variation in calling profiles. About a third of the sample reported spending 10 minutes or less telephoning on the typical weekday, while 2/3 spent a half hour or under. Only 15% spent an hour or more. Mean calls received nearly equalled calls made, with approximately a half-dozen of each per weekday across the sample (Table 5). However, these means tend to overrepresent calling frequency because of a small subgroup regularly making well over 10 calls daily (Table 6). In

fact, medians of four were found for calls both made and received.

The hierarchical regression analyses in Table 7 show the independent effect of each demographic predictor on call time and calls made and received, and the independent effect of each gratification on phone behavior while controlling for demographics as a block. It's immediately apparent that while women talk significantly longer on the phone, they are not any more likely to make or receive calls than are men. Age is the most comprehensive demographic predictor, with younger adults making and getting more calls, and spending more time talking. The less educated have more calls, but spend no more time speaking than the more educated. Income, however, is negatively related to time spent.

As might be expected, the gratification measures were generally positively and significantly related to phone behaviors: the more gratification sought, the more phone use. Calling time was best predicted by entertainment seeking and time management; however, it was unrelated to acquisitional motivations. Likely such calls tend to be of shorter duration. Time management was slightly more predictive of calls made and received than were the other gratifications.

As for affiliation of callers, most conversations were with friends or relatives less than an hour's drive away, with an average of eight such calls over a week's time (Table 5). Calls with someone else in the household averaged about four a week

(excluding sole householders); talking with people providing information accounted for a mean of nearly three, vs. less than two with people requesting information of the respondents. These means seem low compared to those for total calls made and received, and likely reflect some "telescoping" on the part of respondents since they were asked to respond over a full week's timeframe. Calls to "800" numbers averaged close to five a month, but less than one a month across the sample for "900" numbers.

Younger adults were more likely to speak with friends or relatives, and with people giving them information (Table 8). The more educated and affluent talked more with others in their own households, and with persons requesting information from them. Gender had little effect here, except that women were somewhat less likely to be asked for information. As expected, persons in larger households shared more calls with others in the home, while those in smaller ones talked more with nearby friends and relations.

Gratifications related to affiliation yielded something of a mixed bag of relationships. Using the phone for social interaction was predictive of all caller affiliations save others in the household. Entertainment predicted talking to friends and relatives, as well as to people asking for information. (This may indicate more willingness to take solicitation calls.) Acquisition was positively related to frequency of information-related calls, as well as being the only predictor of household ones. The more emphasis placed on using phones for time

management, the more information-related calls, and the more conversations with nearby friends and relatives.

As for uses of "800" numbers, men, the more educated, and higher income persons were more likely to call them. People using the phone more for time management used them more. Younger persons called "900" numbers more often, and time management and social interaction were negative factors in their use. As previously found, higher income -- as well as more educated -- adults were likelier users of audiotex services.

DISCUSSION

The above findings identify: (a) entertainment, social and instrumental dimensions of telephone use motivations; (b) patterns of individual variation in types of gratifications sought; and (c) telephone behavior patterns associated with these gratifications. While the items making up the instrumental dimensions of the studies differ from those of LaRose and Mettler (1990), comparable intrinsic use items factor into similar entertainment and sociability dimensions. For example, the notions of using the phone to express feelings of caring, to stay in touch with people, and to summon help (as in the event of emergencies) group together in the sociability or social uses dimensions. Deriving enjoyment from or using the phone for entertainment is suggested in both studies by items indicating the need to simply talk to another person, and to use the phone for fun and relaxation.

The array of telephone gratification dimensions is narrower than typically found in mass media and interpersonal communication studies. This may be a consequence of a reduced item set, as LaRose and Mettler suggested regarding their own analysis. However, our measures contained only five fewer items than the Rubin et al interpersonal analysis, and numerous media studies have contained smaller sets (cf. Rosengren et al, 1985). There's ample reason to suspect that telephone use motives indeed group differently from those of other interactions. In terms of actual telephone use behaviors, gratifications turned out to be the strongest predictors. All gratifications positively associated with the number of calls made and received. The greater the motives for entertainment, time management and social interaction, the more time people spent on the phone.

How do interpersonal gratifications compare with telephone use ones? Rubin et al's demographic patterns of gratification items for interpersonal communication closely corresponded to those we found for age and gender. For example, Rubin et al report that "younger people used communication more for pleasure, inclusion, and escape, while older persons were more concerned with giving affection." Our correlations indicate the same results for such items as "Sometimes you just like to talk" (pleasure), "To keep you company" (inclusion), and "To help pass the time" (escape). Older people are apt to use the phone to express affection ("To let others know you care for them"). Women found the same gratifications for unmediated interpersonal

communications as they did for the telephone, including pleasure, expressing affection, inclusion and relaxation.

Ties between media and telephone gratifications are less clear, except that entertainment-seeking is a significant motive for both kinds of communication activities, and predicts frequency of use of both. The lack of a more pure information-seeking dimension for telephone use distances it from most media gratification models. Here, using the telephone for gathering information is more tied with immediate potential for putting it to use, e.g. buying or scheduling something. On the other hand, the negative correlation between employment and the items "to keep you company" and "using the telephone is fun" suggests that the more homebound may use telephones in ways similar to media for companionship and diversion. Blumler (1979) reported that people confined to the home without a telephone scored higher on two television viewing functions, diversion and personal identity seeking, suggesting a substitution element.

Previous studies consistently reveal certain gender differences in telephone use patterns. While we corroborate Claisse and Rowe, and LaRose and Mettler, in finding that women spend more time on the phone, gender did not predict the number of calls made and received. We also found women to be significantly higher in sociability and entertainment gratification seeking, but not acquisition and time management. We did not corroborate Noble's (1987) finding that women receive and make more intrinsic calls than men. His definition of

intrinsic--calls made to or initiated by family and friends--is similar to our affiliation variables that show women are no more likely than men to speak to friends and relatives. In an ethnographic study of telephone use by the elderly in Hawaii, Lum (1985) observed that it is the woman who assumes the role of maintaining relationship contacts with family. Similar observations of the functional aspects that such relationship maintenance entail have been observed by others (Claisse & Rowe, 1987; Rakow, 1987). Perhaps the nature of the "social call" can at times disguise its instrumental purpose, and satisfactorily completed instrumental calls may lead women (as well as men) to find telephone use enjoyable and relaxing.

Noble (1987) suggests that employed people may come to regard the telephone as more of an instrumental device, and our findings point to significant associations between employment and instrumental phone motives. Accessing information, making purchases, and planning are considered more salient by employed respondents. Higher socioeconomic status, as measured by income and education, was positively associated with instrumental telephone uses, including "800" numbers and audiotex. An obvious explanation for this result is that people with higher incomes can afford to travel and spend their money on entertainment outside of the home. In addition, they may be more concerned with the efficient management of their time to coordinate their home, work and social lives. More educated individuals may also be more aware of the availability of telephone information

services. Less educated people, on the other hand, still make and receive significantly more phone calls.

Unlike previous studies, our findings show that age is a strong predictor of telephone use behavior, with younger adults using the phone more on all dimensions, and across a range of calling partners and services. The lack of such correlation in earlier research may be in part due to weaker measures; nonetheless, as Claisse and Rowe (1987) observed, age should be more closely examined as separated from such constructs as generation, social position, and position in the life cycle.

Surprisingly, household size does not yield any significant association with the four gratification factors. However, on the individual items, people in smaller households tend to find the phone useful for companionship and keeping up-to-date on people and events. In larger households the association is positive for getting information on products and services, and informing and advising others. Phone behavior patterns for household size showed that the fewer the residents, the more the phone is used to speak with friends and relatives nearby. And the larger the household, the more the phone is used to speak with other household members.

The sample observed here largely reflects residents of Midwestern mid-sized cities and their immediate environs. We need to further explore how individuals in more densely--or more sparsely--populated areas might differ in their motives and behaviors. We have overlooked for now any distinction between

gratifications sought through telephone use and those actually obtained. Telephony also needs to be examined in the context of broader unmediated interpersonal communication patterns, and uses of mass media. The latter becomes especially important as phones provide more services akin to those of certain media.

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Table 1

Mean Scores of Telephone Gratification Items

Gratifications	Mean
Surveillance	
To find out what's going on with other people	3.7
To keep up-to-date on people and events	3.2
Information gain	
To get information about products or services	2.7
To learn about how to do things	2.1
To get information quickly	3.6
Purchasing and Scheduling	
Using the telephone helps organize your day	3.0
To order things or schedule appointments	3.5
To buy tickets for travel or special events	2.1
To make or change plans	3.5
Arousal	
Because using the telephone is fun	1.9
Because it's entertaining	1.8
Escape/relaxation	
To help pass the time	1.9
Because using the telephone relaxes you	1.8
Affection	
To let others know you care for them	3.7
To share things with people close to you	3.7
To stay in touch with people you don't see very often	3.8
Inclusion	
To get advice or support	3.1
To feel involved with what's going on with other people	3.3
Because sometimes you just like to talk	2.3
To keep you company	1.9
Personal/Social Control	
To inform or advise others	3.3
To avoid having to go out	2.5
To have on hand in case of emergencies	4.7

Scale of 1 to 5 where 1 = Does not apply; 5 = Applies a great deal

Table 2

Factor Analysis of Telephone Gratification Items

Gratification	Mean*	Factor 1	Factor 2	Factor 3	Factor 4
Sociability					
To share things with people close to you	3.7	.81913	-.30215	.18092	-.21241
To let others know you care for them	3.7	.78403	-.21337	.14870	-.11093
To stay in touch with people you don't see very often	3.8	.72872	-.10650	.12701	-.40081
To feel involved with what's going on with other people	3.3	.67004	-.42679	-.08447	-.45314
To keep up-to-date on people and events	3.2	.64126	-.38611	.02239	-.51582
To inform or advise others	3.3	.62006	-.22923	.25112	-.54410
It lets you find out what's going on with other people	3.7	.61114	-.24353	-.09402	-.40637
To get advice or support	3.1	.58478	-.37034	.23967	-.38313
To have on hand in case of emergencies	4.7	.43418	.21554	-.16654	-.29019
Entertainment					
To keep you company	1.9	.26200	-.83493	.04552	-.31235
Because using the telephone relaxes you	1.8	.19665	-.81057	.06872	-.16880
To help pass the time	1.9	.19494	-.79381	.02879	-.24606
Because it's entertaining	1.8	.23947	-.77481	.15196	-.09087
Because sometimes you just like to talk	2.3	.35387	-.74329	-.02675	-.32883
Because using the telephone is fun	1.9	.16108	-.69010	.17449	-.08963
Acquisition					
To buy tickets for travel or special events	2.1	.10552	-.05072	.76776	-.14236
To get information about products and services	2.7	.11124	-.08721	.67382	-.28---
To learn about how to do things	2.1	.18100	-.35078	.54197	-.49185
To order things or schedule appointments	3.5	.32224	-.04733	.52361	-.47911
Time Management					
To make or change plans	3.5	.42764	-.05452	.20620	-.78141
To get information quickly	3.6	.44369	-.12834	.40202	-.72747
Using the telephone helps organize your day	3.0	.21929	-.28023	.16054	-.63665
To avoid having to go out	2.5	.17930	-.27194	.25026	-.48841

* Scale of 1 to 5 where 1 = Does not apply; 5 = Applies a great deal

Table 3

Zero-order Correlation Coefficients of Gratification Items with Demographics

	Demographics					
Gratifications	Gender	Age	Education	Employment	Income	Household Size
Sociability						
To share things with people close to you	.31[c]	.04	.06	-.05	.03	-.04
To let others know you care for them	.24[c]	.09[a]	-.01	-.03	-.08	-.07
To stay in touch with people you don't see often	.18[c]	-.06	.05	.09[a]	.10[a]	.01
To feel involved with other people	.16[c]	-.07	.08[a]	-.01	.05	-.01
To keep up-to-date on people and events	.12[b]	-.10[a]	.12[b]	.05	.02	-.08[a]
To inform or advise others	.04	-.13[b]	.11[b]	.15[c]	.17[c]	.10[b]
To find out what's going on with other people	.12[b]	-.14[c]	.03	.03	.01	-.01
To get advice or support	.22[c]	-.07	.09[b]	-.02	.06	-.01
To have on hand in case of emergencies	.12[b]	.08[a]	-.10[a]	-.03	.06	.02
Entertainment						
To keep you company	.17[c]	-.10[b]	.01	-.08[a]	-.08	-.09[a]
Using the telephone is relaxing	.19[c]	-.05	-.01	-.11[b]	-.10[a]	.04
To help pass the time	.16[c]	-.12[b]	-.03	-.04	-.04	.00
Because it's entertaining	.19[c]	-.04	.06	-.08	-.03	-.04
Sometimes you just like to talk	.23[c]	-.18[c]	.04	-.05	-.04	-.04
Using the telephone is fun	.17[c]	-.05	.01	-.13[c]	-.02	-.01
Acquisition						
To buy tickets for travel or special events	.00	-.07	.19[c]	.10[b]	.21[c]	.01
To get information about products and services	-.04	-.17[c]	.18[c]	.15[c]	.22[c]	.12[b]
To learn about how to do things	.01	-.14[c]	.04	.05	.04	.05
To order things or schedule appointments	.10[b]	.00	.10[b]	-.01	.09[a]	.06
Time Management						
To make or change plans	.07	-.21[c]	.07	.10[b]	.12[b]	-.01
To get information quickly	.00	-.15[c]	.15[c]	.11[b]	.14[c]	.03
Helps organize your day	.11[b]	-.19[c]	.11[b]	.06	.05	-.02
To avoid having to go out	.09[b]	.00	-.03	-.01	.03	.03

a = $p < .05$; b = $p < .01$; c = $p < .001$

Table 4

Regression Analysis of Demographics on Telephone Gratifications

	Gratifications (n = 597)							
Demographics	Social		Entertainment		Acquisition		Time Mgt.	
	z.o.	β	z.o.	β	z.o.	β	z.o.	β
Gender (0 = male)	.26[c]	.28[c]	.13[b]	.09[a]	-.04	.01	.07	.05
Age	.12[b]	.15[c]	-.06	-.13[b]	-.02	.04	-.22[c]	-.22[c]
Education	.03	.07	.03	.06	.19[c]	.15[c]	.02	.04
Employment	-.02	.07	-.12[b]	-.13[b]	.11[b]	.04	.11[b]	.01
Income	.00	.01	-.06	-.10[a]	.21[c]	.14[b]	.09	.07
Household Size	-.04	.01	-.03	-.04	.06	.05	.05	-.04
(Adjusted R^2)		(.08)		(.04)		(.05)		(.05)

Values are standardized regression coefficients
a = $p < .05$; b = $p < .01$; c = $p < .001$

Table 5

Mean Scores for Telephone Time, Call Frequency, and Affiliation of Calls

	Mean
Time and Frequency	
Call Time (min./wk.)	290.12
Calls Made (wk.)	36.05
Calls Received (wk.)	31.24
Affiliation	
Someone in Household (wk.)	4.02
Friends/Relatives Near (wk.)	8.10
Friends/Relatives Far (wk.)	2.17
People Giving Information (wk.)	2.61
People Asking for Information (wk.)	1.82
800 Number Calls (mo.)	4.63
900 Number Calls (mo.)	0.10
Audiotex Use	2.24*

* 4 = weekly, 3 = monthly, 2 = less than monthly, 1 = never

Table 6a

Minutes Spent on the Telephone During an Average Weekday

Minutes	n	%
0 to 10	172	29.5
11 to 20	121	20.8
21 to 30	91	15.6
31 to 40	6	1.0
41 to 50	25	4.3
51 to 60	78	13.4
61 to 70	0	0.0
71 to 80	3	0.5
81 to 90	23	3.9
91 +	64	11.0
Total	583	100.0

Table 6b

Number of Calls Made and Received on an Average Weekday

	Calls Made		Calls Received	
Number of Calls	n	%	n	%
No calls	21	3.5	18	3.0
1	50	8.4	77	13.0
2	111	18.8	129	21.8
3	102	17.2	103	17.4
4	57	9.6	55	9.3
5	89	15.0	73	12.3
6	37	6.3	39	6.6
7	13	2.2	10	1.7
8	15	2.5	14	2.4
9	2	0.3	1	0.2
10	37	6.3	26	4.4
11 +	58	9.8	48	8.1
Total	592	100.0	593	100.0

Table 7

Regression Analysis of Demographic and Gratification Variables on Telephone Use

	Telephone Use (n = 597)		
	Call Time	Calls Made	Calls Received
	ß	ß	ß
Demographics			
Gender (male = 0)	.19[c]	.02	-.01
Age	-.13[b]	-.26[c]	-.20[c]
Education	.03	-.12[b]	-.18[c]
Employment	.04	-.07	-.04
Income	-.14[c]	-.05	-.03
Household Size	-.04	.01	.04
(Adjusted R^2)	(.10)	(.08)	(.07)
Gratifications			
Sociability	.18[c]	.14[b]	.12[c]
Entertainment	.24[c]	.14[b]	.15[b]
Acquisition	.05	.12[b]	.11[b]
Time Mgt.	.21[c]	.19[c]	.18[c]
(Adjusted R^2)	(.19)	(.14)	(.11)

Values are standardized regression coefficients
a = $p < .05$; b = $p < .01$; c = $p < .001$

Table 8

Regression Analysis of Demographic and Gratification Variables on Affiliation of Calls and Services Used

	Affiliation of Calls (n = 597)					Services Used		
	Others in Household	Friends/ Relatives Near	Friends/ Relatives Far	People Giving Info.	People Asking Info.	800 Calls	900 Calls	Audiotex Use
	ß	ß	ß	ß	ß	ß	ß	ß
Demographics								
Gender (male = 0)	-.04	.02	.04	-.02	-.09[a]	-.14[b]	.04	-.03
Age	-.04	-.22[c]	-.13[b]	-.17[c]	.00	-.05	-.12[a]	-.07
Education	.10[a]	-.04	.08	.08[a]	.10[a]	.21[c]	.05	.12[b]
Employment	.12[b]	-.14[b]	-.02	-.09[a]	.02	.00	.00	-.07
Income	.09	.12[b]	.02	.04	.09[a]	.09[a]	.00	.10[a]
Household Size	.19[c]	-.19[c]	-.08	.02	.00	.04	-.01	-.02
(Adjusted R^2)	(.10)	(.08)	(.03)	(.06)	(.03)	(.11)	(.00)	(.04)
Gratifications								
Sociability	.08	.12[b]	.14[b]	.15[c]	.17[c]	.07	-.14[b]	-.01
Entertainment	.07	.16[c]	.09[a]	.04	.10[a]	-.03	-.02	.05
Acquisition	.11[a]	-.02	.13[b]	.20[c]	.10[a]	.14[c]	-.02	.07
Time Mgt.	.09	.21[c]	.05	.28[c]	.13[b]	.11[a]	-.16[c]	.07
(Adjusted R^2)	(.11)	(.13)	(.06)	(.14)	(.05)	(.13)	(.03)	(.04)

Values are standardized regression coefficien
a = $p < .05$; b = $p < .01$; c = $p < .001$

Television Coverage of Criminal Trials With Cameras and Microphones: A Controlled Experiment of Audience Effects

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ABSTRACT

Effects on viewers of news cameras in the courtroom have been debated with the debut of Court TV and expanded coverage of high-profile trials. Building on information processing theory, this study compared the effects of viewing a videotaped criminal trial or the same trial sketched by an artist. Recall of information, appeal of presentation, and willingness to testify or serve as a juror were measured. Results indicate that cameras enhance information gain but cause no attitude change that would imperil justice.

Accepted by the Radio-Television Journalism Division, AEJMC
Montreal, Que, Canada, Friday, August 7, 1992, 3:15 - 4:45 p.m.

TELEVISION COVERAGE OF CRIMINAL TRIALS WITH CAMERAS AND MICROPHONES: A CONTROLLED EXPERIMENT OF AUDIENCE EFFECTS

The inauguration of "Court TV" on cable, the gavel-to-gavel televising of the William Kennedy Smith trial as well as the coverage of the grotesqueries of the Jeremy Dahmer trial have brought the issue of court coverage by cameras and sound recordings to top of the agenda for journalists and lawyers more than any time since the Supreme Court decided Chandler v. Florida in 1981.

Although the majority in Chandler rejected the idea of a news photographer's First Amendment right of access in gathering news from the courtroom, the justices recognized that the presence of cameras did not per se render the trial unfair to the accused. The Supreme Court left it up to each state to decide if news cameras were to be permitted in the trial and appellate courts.

According to the 1992 status report compiled by The Radio-Television News Directors Association ("More States OK"), only the District of Columbia and four states--Indiana, Mississippi, Missouri and South Dakota--have barred cameras completely, but cameras are not as universally used by news reporters as the report might indicate.

Six of the states permit cameras only in appellate courts and others have allowed cameras only in civil proceedings. These are not likely to generate the newsworthy testimony or drama that justify the assignment of a camera crew or still photographer. Other jurisdictions set up content-based restrictions or permit any

participant--witness, accused or lawyer--to veto coverage Such exceptions to camera coverage make it increasingly unlikely that photographic coverage will be used (Killian, 1987).

The recent televising of the high-profile criminal trials, however, has focused attention on the states that technically have ongoing state supreme court rules permitting cameras and tape recorders in courts, but then make the permissions and procedures so burdensome as to negate any photographic news coverage. In states like Illinois, which has these onerous restrictions, even viewers ask why no local criminal trials are shown on newscasts. Such queries have resulted in broadcasters seeking liberalization of the rules of criminal procedure. Several states have experienced changes in camera/court coverage during the past year or so.

Trial courts in Illinois are still without camera coverage after a December 1991 vote by the State Bar Association overwhelmingly rejected a proposal favoring cameras. In Missouri, where a broad ban on news cameras exists, a task force has recently been formed to study proposals for change. Oregon has relaxed its pooling requirements; Virginia has moved from an experimental program to a permanent one and a report prepared for the Vermont Supreme Court recommended that the experimental coverage be made permanent. In South Carolina, long one of five holdouts against cameras, a February murder trial was televised and broadcast under a six-month experiment in one court in Richland County ("Judges Ease.Restrictions," 1992; "More States OK," 1992).

The issue of television in the courts still pits journalists who claim a First Amendment right to use the tools of their trade in the gathering of news against those in the legal community who see television as a sensational, entertainment medium and reporters as disruptive of the judicial process. News personnel emphasize the public's right to know how the courts operate and television's ability to make legal issues interesting. Judges and defense lawyers fear that cameras change the behavior of courtroom participants, particularly lawyers or reluctant witnesses and judges seeking political advancement. They also fear the widespread publicity that would make it impossible to find unbiased jurors should a retrial become necessary.

Literature Review

Audience effects studies could give empirical support for the hopes or warn of the pitfalls expected from news cameras and microphones in the courtrooms, but unfortunately few of these have been done. That stories with video pizzazz get the best play on a newscast is axiomatic among news directors (Epstein, 1973). Generally a talking head is considered least desirable, and an actuality will be selected over a story with static illustration or graphics (McDaniel, 1973: Patterson & McClure, 1976).

In relating this axiom to the coverage of courts, Fred Graham (1978), CBS law correspondent and Court TV commentator, called the technique of using artists' sketches "so primitive and expensive that frequently judicial matters are simply not covered" (p. 547), especially if a case was only marginally newsworthy. He maintains

that with the wider use of televised courtroom actualities will come an increase in news about judicial matters and hence increased public understanding of the courts.

The arguments of those opposed to cameras are summarized in a review article by Day (1981), published right after Chandler was decided. In spite of the holding in that case, he encourages continued opposition to cameras in the courtroom. He reiterates that "The judicial process is not designed or intended to educate, inform, or entertain the public. It is a search for truth" (p. 19). For Day the requirement of judicial openness is adequately met by the availability of a transcript and public/media presence in the courtroom. Much of legal opposition to cameras is based on Estes, decided in 1965. But the concurring opinions were so diverse in that case that its applicability today is ambiguous even though Chandler did not overturn the Estes holding.

Ross and Lurie (1980) write that Estes dealt primarily with the harmful effect of pretrial publicity, not the publicity during trial. Much of the most widely broadcast material for the Estes case was from a hearing prior to the trial itself. Recent cases make the sharp distinction between media's coverage of a pre-trial hearing and of the trial itself. The Supreme Court ruling in Gannett v. DePasquale (1979) which ruled that, upon agreement of the parties, the media and public could be barred from a pretrial hearing to avert the danger of adverse publicity on the defendant's right to a fair trial is in sharp contrast to Richmond Newspapers, Inc. v. Virginia (1980) in which the Court refused to extend the rationale of DePasquale to the

trial itself. Chief Justice Warren Burger wrote for the majority in that case,

> Instead of acquiring information about trials by first-hand observation or by word of mouth from those who attended, people now acquire it chiefly through the print and electronic media. In a sense, this validates the media claim of functioning as surrogates for the public (Richmond Newspapers, Inc. v. Virginia 448 U.S. 572-573, 1980).

Stone and Edlin (1978) outline the potential that camera coverage has as a socialization device. They express hope that there will be an improvement in understanding of the judicial system, an awareness of citizens' rights and responsibility, and a scrutiny of the judicial process that will lead to greater competence of judges and lawyers.

Some studies using social science research methods have been undertaken to determine effects of courtroom news cameras. Two pre-Chandler empirical studies have been widely cited, Hoyt (1977) and Netteburg (1980).

Hoyt's experiment found evidence that testimony reliability improved when the witnesses were aware that they were being televised.

Netteburg focused on a widely publicized, wife abuse case. He found that although many people knew about the case, few doubted the defendant's testimony that she had been beaten and abused by her husband, and more than half incorrectly remembered the outcome of the trial, that she had been convicted of murder but

found not guilty of arson, and another 36% either had not heard of the trial or could not remember its outcome. This suggested to Netteburg that a large pool of potential jurors exists, should a retrial be necessary.

Methodology

Building on information processing theory and Hsia's (1968) research, which indicates communication efficiency and dependability are higher with an audio-visual presentation than with either the audio or video alone, this controlled experiment was devised to apply what is known about audio-visual information processing to the courtroom-camera debate.

The following hypotheses concerning television courtroom coverage were tested:

H1: Television news coverage of a criminal trial with courtroom videotape actualities results in significantly greater audience retention of facts about the case than coverage of criminal trials with sketches and voice-over or than trial coverage using a talking head.

H2: Television news coverage of a criminal trial with courtroom videotape actualities results in significantly greater appeal of presentation than coverage of criminal trials with sketches and voice-over, or than trial coverage using a talking head.

H3: Television news coverage of a criminal trial with courtroom videotape actualities results in significantly greater willingness by viewers to serve on a jury, if called to jury duty, than will coverage of criminal trials with sketches and voice-over, or than trial coverage using a talking head.

H4: Television news coverage of a criminal trial with courtroom videotape actualities results in significantly greater willingness to be photographed as a witness than coverage with sketches and voice-over, or than trial coverage using a talking head.

H5: Television news coverage of criminal trials with courtroom videotape actualities will result in significantly greater conformity of the television viewers' perception of a defendant's guilt or innocence with the actual verdict than will coverage with sketches and voice-over, or by a talking head.

The independent variable is mode of presentation. It has three conditions--courtroom videotaped actuality, sketches and voice-over, and talking head. The dependent variables are retention of facts, appeal of presentation, willingness to serve on a jury, willingness to be a photographed witness and ability to conform the verdict to the actual jury decision.

A posttest only controlled experiment was chosen for this study because of the importance of ruling out alternative causes of the observed differences in the groups viewing the courtroom photographs and the groups viewing the sketches and the talking head. It is recognized that this experimental plan has low external validity, but to increase the external validity the courtroom segment was edited into an authentic local newscast so it had the naturalistic setting of the other news stories and commercials accompanying it. Also, the subjects were 83 evening school adults or summer workshop and communication students who were randomly assigned to the three treatment groups (Williams et al., 1988).

To avoid familiarity with the information from the criminal case used in the treatments, videotape of a newsworthy case was obtained from an out-of-state news director. This was an Iowa murder case that had been given extensive coverage where the accused was tried, but almost no attention elsewhere. This trial was not covered gavel-to-gavel but video excerpts were shown regularly on the local news throughout the trial. This courtroom video was edited into a file newscast from a television station with whose personnel and format the subjects could have been familiar. The cooperation of the local anchor was key in weaving the experimental material into the local news program. (He even wore the same necktie for the lead-in to the murder story as he did in the newscast into which we edited the murder trial video, the sketches or the talking head.)

It was also planned that the newscast have several other stories with legal implications so that the questionnaire items dealing with legal issues not draw attention to the experimental news story. The bankruptcy of a local businessman, a civil suit against a politician for campaign debts, and a health feature on the legalization of marijuana all related to some aspect of law and judicial issues. The weather and sports segment of the newscast were shortened by taking out material that emphasized the specific date of the newscast. Also it was concluded that weather and sports have less salience for a viewer who is not watching them on the day of broadcast. It was important to maintain the viewer's attention while keeping the newscast as realistic as possible. A professional

courtroom artist was hired to draw the sketches after she viewed the video.

The subjects viewed the versions of the newscasts on television monitors while in a classroom setting. This was the most artificial aspect of the experiment because obviously most persons view the news in home settings.

After viewing the newscast, subjects in each group were asked to answer multiple-choice questions about the murder trial and the three other news stories. Their attitudes about the stories and their attitudes about serving as a juror or witness were measured using Likert scale responses. Selected questions to measure their attitudes about the justice system generally were taken from a Yankelovich, Skelly and White (1978) study.

Data were coded and then analyzed using the Statistical Package for the Social Sciences. The sub-programs--frequencies, crosstabs and oneway--were employed. Nominal level data were analyzed using the complex chi-square to test the hypothesis of relationship between the variables. Interval level data, generated by Osgood and Likert-type scales, for which means and variances can be calculated, were analyzed for statistical significance using the one-way analysis of variance. The level of significance used for all analysis was the .05 alpha level.

Results

H1: Television news coverage of a criminal trial with courtroom videotape actualities results in significantly greater audience

retention of facts about the case than coverage of criminal trials with sketches and voice-over or than trial coverage using a talking head.

This hypothesis was supported at the .05 level.

To measure the level of cognitive recall of factual information about the trial, ten multiple-choice questions were formulated for aided recall. The number correct across these questions ranged from 0 to 9. The mean number correct is reported in Table 1.

Tables 1 and 2 about here

The results of one-way analysis of variance showed a significant difference in aided recall between the groups that received the experimental treatment. The analysis of variance of the aided recall scores is shown in Table 2.

H2: Television news coverage of a criminal trial with courtroom videotape actualities results in significantly greater appeal of presentation than coverage of criminal trials with sketches and voice-over, or than trial coverage using a talking head.

This hypothesis was not supported (F=1.0), but the results were in the direction expected.

H3: Television news coverage of a criminal trial with courtroom videotape actualities results in significantly greater willingness by viewers to serve on a jury, if called to jury duty, than will coverage of criminal trials with sketches and voice-over, or than trial coverage using a talking head.

This hypothesis was not supported (F=1.76).

This hypothesis was tested using two questions--one specifying that members of the jury would be photographed and the other specifying that they would not. The responses are shown in Tables 3 and 4.

Tables 3 and 4 about here

The one-way analysis of variance of the differences between groups on these two questions yielded no significant differences. However, note in comparing the data in the two tables that for each of the groups, subjects were more willing to serve as jurors if they were assured that they would not be recognized in photographs.

H4: Television news coverage of a criminal trial with courtroom videotape actualities results in significantly greater willingness to be photographed as a witness than coverage with sketches and voice-over, or than trial coverage using a talking head.

This hypothesis was not supported (F=1.50) See Table 5.

Table 5 about here

Because one-way analysis of variance found no difference between these groups, it is interesting to examine how the subjects describe the feelings that they believe will affect their testimony. The results, reported in Table 6, are an aggregate of data from all treatment groups.

Table 6 about here

H5: Television news coverage of criminal trials with courtroom videotape actualities will result in significantly greater conformity of the television viewers' perception of a defendant's guilt or innocence with the actual verdict than will coverage with sketches and voice-over, or by a talking head.

This hypothesis was not supported (Defendant Hollins, $X = 3.77$. $df = 3$; Defendant Brown, $X = 2.40$; $df = 3$). See Tables 7 and 8.

Tables 7 and 8 about here

Chi Square analysis of the differences between groups on the perception of guilt of both defendants was not significant. This means that no viewing group was significantly closer than any of the others to the real life verdict handed down by the Iowa jury, which was that Hollins was not guilty and Brown was guilty. However, two subjects viewing the videotape version conformed their judgment of guilt for each defendant to that of the actual jury, whereas the scores from the sketches show one more vote for Hollins's guilt than for Brown's, the opposite of the actual occurrence.

Conclusion

The television viewers' aided recall of factual information about the criminal case was significantly higher with videotape actuality coverage than with sketches or a talking head.

One viewing of a videotaped report of a criminal trial had no appreciable effect on the attitudes of the audience toward the justice system or on their willingness to serve as a juror or witness if summoned. Even though television viewers see only part of courtroom testimony in the abbreviated coverage given by newscasts, their perceptions of a defendant's guilt or innocence is unlikely to be affected by what is seen on television.

Like all experiments lacking external validity, this study cannot be generalized beyond the subjects who participated. However, experiments are the best evidence for causal direction, and the superiority of videotape in conveying information that was expected from the information processing literature was supported.

The responses to the two questions dealing with willingness to serve on a jury show jurors are less willing to serve if they expect to be photographed. This supports the guidelines prohibiting or limiting the photographing of jurors that most states have included in their court rules when cameras are permitted to cover trials. This is a restriction that journalists seem willing to live with. It is possible to cover trial testimony, to show the defendant, and to photograph the lawyers and judge without exposing jurors to the community pressure than could result if they became instantly recognizable.

Certainly more research needs to be done on both facets of the cameras in the courtroom issue--the effect on the fairness of the trial and the effect on the public's knowledge and attitudes. Public policy making should not only be concerned with preventing negative effects. The search should continually be made to institute changes that will be for the broader public interest. The First Amendment value of the public's right to know must be emphasized with the Sixth Amendment guarantee of a fair trial.

Like Cohen (1982) who calls for the development of a qualitative difference test to create standards for determining instances when cameras could compromise the fairness of the trial, this researcher maintains that continuing behavioral science research will help make these legal and policy decisions.

Also this study focused on the typical evening news reports and the information received from them. The changes in knowledge and attitudes that result from gavel-to-gavel coverage also needs exploration.

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Table 1. Mean Number of Correct Answers (Aided Recall Scores)

Treatment Groups		
Videotape (n=27)	Sketches (n=31)	Talking Head (n=25)
4.85	3.032	2.760

Table 2. Analysis of Variance for Retention of Facts (Aided Recall) by Treatment

Source	DF	SS	MS	F-Ratio
Between Groups	2	69.6673	34.8336	9.153*
Within Groups	80	292.9351	3.6617	
Total	82	362.6024		

*Significant at .05 alpha level.

Table 3. Willingness to Serve as Juror--Photographed

Attitude Question: If called to be a juror in a criminal trial that you realized was to be televised and you might be recognizable as photographed on a news program, how willing would you be to serve?

Group	Extremely Willing	Somewhat Willing	Neutral	Somewhat Reluctant	Extremely Reluctant
Videotape (n=27)	4	3	2	10	8
Sketches (n=31)	2	8	6	9	5
Talking head (n=25)	0	3	4	11	7
Control (n=26)	4	7	1	9	5

$p > .05$

Table 4. Willingness to Serve as Juror--Not Photographed

Attitude Question: If called to be a juror for a criminal trial but assured by the court that jurors would not be photographed, how willing would you be to serve?

Group	Extremely Willing	Somewhat Willing	Neutral	Somewhat Reluctant	Extremely Reluctant
Videotape (n=27)	10	13	3	0	1
Sketches (n=31)	7	15	4	2	2
Talking head (n=25)	4	11	5	5	0
Control (n=26)	8	10	1	4	3

$p > .05$

Table 5. Witnesses' Likelihood of Objecting to Camera Presence

Attitude Question: If subpoenaed as a witness in a criminal trial that you knew was to be televised, but you were advised by the court that you could object to the camera focusing on you but your testimony would be recorded, how likely would you be to object?

Group	Definitely Would Object	Likely Would Object	Neutral	Likely Would Not Object	Definitely Would Not Object
Videotape (n=27)	4	5	7	11	0
Sketches (n=31)	3	8	6	12	1
Talking head (n=25)	5	9	5	6	0
Control (n=26)	5	6	8	3	3

Table 6. Self Report of How Cameras Would Affect Testimony

Attitude Question: If subpoenaed as a witness in a criminal trial that you knew was to be televised and the camera was to be focused on you while testifying, how do you think this would affect your testimony? Choose the item that most closely reflects your feelings.

Effect	Number of Responses	Percentage of Responses*
Not much	9	8.4
Not at all	7	6.5
Scared	11	10.2
Nervous	48	53.1
More careful to be accurate	26	24.3
Reluctant	10	9.3
Would pose for camera instead of concentrating on lawyers' questions	5	2.6

*Totals more than 100% because of multiple responses.

Table 7. Perceived Guilt of Jay Hollins

Attitude Question: From the admittedly condensed summary of the testimony in the Jay Hollins and Ronald Harris Brown trial, do you believe Jay Hollins is guilty or not guilty?

	Treatment Groups		
	Videotape (n=27)	Sketches (n=31)	Talking Head (n=25)
Percent of S's believing Hollins guilty	76.0	85.5	95.0
Percent of S's believing Hollins not guilty	24.0	11.5	5.0
Missing values	2	5	5

$p > .05$

Table 3. Perceived Guilt of Ronald Harris Brown

Attitude Question: Do you believe Ronald Harris Brown, referred to by witnesses as "Joe," is guilty or not guilty?

	Treatment Groups		
	Videotape (n=27)	Sketches (n=31)	Talking Head (n=25)
Percent of S's believing Brown guilty	84.0	95.7	90.0
Percent of S's believing Brown not guilty	16.0	4.3	10.0
Missing values	2	8	5

$p > .05$

ATTRIBUTIONAL CONFIDENCE, MEDIA USE, AND ADAPTATION: COMMUNICATION AND ADAPTATION RECONSIDERED

paper presented at the 1992 Annual Conference of
Association of Education on Journalism and Mass Communication
(AEJMC) August 5-8, 1992, Montreal, Canada

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Draft: comments and suggestions are welcome.

INTRODUCTION

The immigrant experience is a dynamic process that unfolds over several generations and is a major key to understanding the nature of modern American society and culture (Buenker, 1983). It is important for both the immigrants and host people (the offsprings of earlier immigrants or earlier immigrants) to understand the process of adaptation. With the higher birth rate and immigration of ethnic groups, it is not surprising that Anglo-Americans (the majority) could eventually become a minority group (Chua-eoan, 1990; Henry, 1990). Also, the increasing economic and political participation of the "minority" has provided a forum for immigrants to express their opinions and struggle for their rights. The status of ethnic and "minority" groups in the United States is changing. Compared with earlier immigrants, contemporary immigrants usually have different adaptive experiences.

When immigrants feel insecure about their old environment, they may use several ways to increase confidence. Migrating to a new environment that seems full of hope and security is one option, and one of the main motivations for immigration. However, after entering a new environment, it is possible and reasonable for immigrants to feel insecure in the process of adaptation to host society. In other words, the degree of attributional confidence is related to that of adaptation.

Research on attributional confidence theory, one approach to the study of interpersonal communication, has paid little attention to the roles of mass media and new communication technologies in the process. Further, this literature has rarely explored the relationship between adaptation and attributional confidence. In adaptation studies, the literature has examined both mass media and interpersonal communication. Interpersonal communication, however, is usually conceptualized in terms of frequency of contact and number of friends. It lacks attention to such things as the strategies individuals use to interact with each other. For instance, the interaction between individuals and the host people should be different from that between individuals and their countrymen in the initial stage. These interactions should represent individuals' relationships with the host people of a new environment, which can be regarded as one of the indexes of adaptation.

Therefore, this study will use both quantitative and qualitative methods to explore the following directions: (1) what do attributional confidence mean with Chinese immigrants' adaptive experiences; (2)

what have affected their attitudes or behaviors toward adaptation; and (3) what is most helpful for them to adapt to American society.

CONCEPTUAL APPROACH: ADAPTATION AND COMMUNICATION

In order to properly understand the issue of adaptation and communication behavior (as attributional confidence), the starting point should be the major theoretical perspectives about how immigrants adapt themselves to the dominant society. From the adaptive view, the degree of assimilation or pluralism largely depends on the immigrant's intention to reside in the host land or the degree of permanence of the new residence. The types of ethnic individuals/groups in adaptation include: immigrants (who plan to stay), short-term sojourners (e.g., short-term trainees or foreign workers, travellers), and long-term sojourners (e.g., international students, long-term foreign workers). According to Taft (1977, p.120), sojourners theoretically do not have to make a deep commitment to adjust to the host culture. However, both sojourners and immigrant groups more or less need to adjust themselves to the host culture at the very least simply to get by day-to-day in.

Gudykunst and Hammer (1988) define adaptation as "a good fit" between an individual and the environment. They presume that adaptation is a subjective perception of one's adjustment into the environment. Gao and Gudykunst (1990) regard adaptation as the consequence of individuals' cognitions about their environment. This definition does not take individuals' behaviors into account.

Milton Gordon (1964) and Young Yun Kim (1988) indicate that adaptation includes the adjustment of individuals' intrinsic and extrinsic traits. The former includes value orientations, attitudes, perceptions, and knowledge. The latter consists of patterns of emotional expression, manners, and communication, which includes social contact. In other words, adaptation is the adjustment between an individual's cognition, his/her behavior, and the environment. It is not only a cognitive but also a behavioral approach.

Allen, Dowson, and Brown (1989) and Subervi-Velez (1989) emphasize that issues of racial identity or ethnic adaptation should be a multi-dimensional concept. Instead of "all or nothing," this implies that immigrant adaptive experiences can be regarded as a multi-dimensional combination of cognitions (knowledge, beliefs, attitudes) and behaviors. The present study, however, will consider individuals' cognitive as well as behavioral adjustment.

Communication has played an important role in adaptation literature. The adaptation process, as identified by Kim (1982), is an interactive and continuous process that evolves in and through the communication of an immigrant with the new social-cultural environment. She emphasizes that both interpersonal and mass media communication exert influences on immigrants' adaptation to the host society.

Interpersonal and mass media communications have been differentiated on the basis of (1) channel type, (2) the number of potential recipients of the messages transmitted, and (3) the potential for feedback (Reardon and Rogers, 1988). Neither definition makes clear how we should regard an individual's communication with other individuals through media? Is it interpersonal or mass media communication? Reardon and Rogers (1988) also indicate that interpersonal and mass media communication should not be separated, but integrated. They call it a false dichotomy to define these two types of communication separately without considering the application of new technologies. In fact, diversified forms of communication sometimes can exist simultaneously. For instance, people can converse with each other about media contents or when they are exposed to mass media.

In the present study, *interpersonal (face-to-face) communication* is defined based on Reardon and Rogers' (1988) definition of information exchange between two persons through face-to-face contact requiring communicators to be present in the same location where the interaction can be combined with body language. *Mass media communication* is any communication that involves the use of mass media. *Mediated interpersonal communication* will be defined for this study as interaction between communicators (at least two person) through media. It is interaction without face-to-face contact between communicators (such as through electronic mail, telephone, telex, notes, and the like). It is communication through mediated channels but interpersonal because the number of potential recipients is not as large as that of mass media communication.

Related research has examined the effects of interpersonal communication, personal (intrapersonal) communication, and mass media communication on adaptation. However, the conceptual approach of interpersonal communication in adaptation has been limited to a focus on the frequency of face-to-face interaction with host people or the proportion of host as well as original friends. In other words, it would

be useful, given the variety of ways people can contact each other, to expand the way we conceptualize an individual's relationship with others in the process of adaptation.

ATTRIBUTIONAL CONFIDENCE AND ADAPTATION

Attributional confidence, derived from the sender-receiver concept of information theory (Shannon and Weaver, 1949), was proposed by Berger and Calabrese (1975; Berger, 1982, 1987) and extended by Gudykunst (1983, 1984, 1986, 1988, 1990) and other speech communication scholars in intercultural encounters. Gudykunst and Hammer (1988) and Gao and Gudykunst (1990) intend to apply attributional confidence theory to explain the concept of adaptation. They propose that attributional confidence (uncertainty reduction) exerts a strong influence on adaptation. Most of their studies compare college students of Japan with students of the United States and are therefore comparative intercultural studies. Few examine the initial interaction of sojourners or immigrants in the process of adaptation to a new environment.

In addition, in past because attributional confidence is usually studied as in interpersonal phenomenon, the role of media use, explored in adaptation literature for recent decades, has not received much attention in attributional confidence research. This research attempts to bring together attributional confidence, adaptation, and media use theory. Here *attributional confidence* is defined as an increase in an individual's confidence in his/her ability to predict and explain other's behaviors, beliefs, and attitudes through face-to-face and/or mediated interpersonal contact. It is also the process of uncertainty reduction, reducing one's uncertainty, or certainty.

Uncertainty Reduction Strategies

Adaptive behaviors examined in previous literature have been amount of mass media use or interpersonal communication (Chaffee, Nass, and Yang, 1989; Kim, 1976, 1977a, 1977b, 1979, 1982, 1988; Subervi-Velez, 1984) or the composition of immigrants' communication networks (Yum, 1982, 1984, 1988). Few studies have tried to elaborate the types of reasons for human communication. Almost no research examines the impact of uncertainty reduction strategies upon adaptation. Uncertainty reduction through information seeking and knowledge acquisition has been elaborated by Berger (1979, 1987, 1988), Berger and Bradac (1982), Gudykunst and Hammer (1988) and other scholars. According to their formulation, there are three broad strategy classes through which individuals reduce uncertainty: passive, active, and interactive. Each will be discussed in turn (see Figure 1).

Figure 1 Traditional and New Views of Uncertainty Reduction Strategies

Passive Strategies	Active Strategies	Interactive Strategies
Interpersonal Communication Perspective (Berger and Calabrese, 1975)		
gathering information by unobtrusive observation	gathering information by asking others about the target	face-to-face contact with the target
Mass Media Communication Perspective (Gudykunst and Hammer, 1988)		
exposure to mass media		
Mediated Interpersonal Communication Perspective		
exposure to media contents related to Americans	contact media organization to express opinions about Americans	mediated interpersonal contact with Americans through media
(e.g., read newspaper, watch TV, or read messages in computer networks related to Americans)	(e.g., reader or audience participation in media or comment on Americans in computer networks)	(e.g., interact with Americans through telephone or E-mail)

Note: the target person=Americans; the observers=Chinese; others=other immigrants (e.g., Chinese or other immigrants).

Passive strategies are those in which the uncertainty reducer gathers information about a target individual or group through (1) unobtrusive observation (Berger, 1979, 1982, 1987, 1988); or (2) reading books, watching television or movies, and observing host nationals interacting with each other (Gudykunst and Hammer, 1988). In other words, passive strategies can increase attributional confidence directly through observation and/or indirectly through media. In this study, both direct observation and mediated "observation" of American life are included in the conceptual definition of *passive strategies*.

Active strategies include (1) asking other strangers about host nationals (Berger, 1979, 1982, 1987; Gudykunst and Hammer, 1988); and (2) taking measures to acquire information indirectly asking third party sources about the target and structuring the environment to see how the target responds to these alterations (Berger, 1988). The second strategy involves no direct interaction between the observer and the target.

The most common form of active strategy in adaptation studies is asking other immigrants who are familiar with host people about the host people (Gudykunst and Hammer, 1988). Yet, active strategies to increase confidence could involve media. For instance, immigrants might contact media organization to express their comments or suggestions about the target person. Individuals can write letters to the editor of print media or participate in program surveys (audience or reader participation) to express their opinions. Also, immigrants might comment on host culture in computer networks. These are indirect

contact with the target persons. Thus, active strategies is defined as asking other Chinese about Americans or contact media organizations to learn about Americans directly in this study.

Interactive strategies include (1) interrogating, self-disclosing, and deception detecting (Berger, 1979; Gudykunst and Hammer, 1988); and (2) involving direct, face-to-face contact between the information seeker and target. (Berger, 1982, 1987, 1988). These imply the use of interactive strategies can be conducted through direct, face-to-face contact, or mediated interpersonal contact.

As for passive and interactive strategies, interactive strategies might also include some forms of mediated interpersonal contact. The difference between these two forms of contact is that mediated interpersonal contact are not necessary one of face-to-face contact. Therefore, this research defined *interactive strategies* as interacting with Americans directly, or mediated interpersonal contact with Americans indirectly.

Media Use and Attitudes Toward Media

On main purpose of this study is to expand the role that media are conceptualized to play in the attributional confidence of immigrants' adaptation process. In general, mass media provide information about the host culture (De Fleur and Dennis, 1981; Gao and Gudykunst, 1990). From a functional approach, mass media serve the functions of surveillance, correlation, entertainment, and cultural transmission (or socialization) for society as a whole as well as for individuals, subgroups, or immigrants within society (Katz, Blumler, and Gurvitch, 1974; Ryu, 1977). People who expose themselves to media have more information to share with their friends or acquaintances and know more about their society.

Individuals who value the importance of media are inclined to use media or contact with media organization. For example, individuals who value the importance of new communication technologies tend to adopt new media (Shoemaker, Reese, and Danielson, 1985). Also, individuals' positive attitudes toward media may affect their cultural identification (Shoemaker, Reese, and Danielson, 1985). This implies that individuals' attitudes toward media may affect their media use and adaptation.

Although largely ignored in the attributional confidence literature, immigrants' mass media use may be important to the process of adaptation. Agenda-setting research tends to show that individuals' uncertainty about public issues is positively related to media use, but attributional confidence studies have not explicitly explored this relationship (McCombs and Weaver, 1973; Weaver, 1977). Instead, Studies

tend to examine three aspects of media use: (1) ethnic as well as host media consumption (Chaffee, Nass, and Yang, 1989; Choi and Tamborini, 1988; Kim, 1977a, 1977b; Lam, 1980; Lee, 1984; Nagata, 1969; Subervi-Velez, 1984; Won-doornink, 1988); (2) content preference in ethnic as well as host media (Hur, 1981; Hur and Proudlove, 1982); and (3) motivation for ethnic as well as host media use (Ryu, 1977).

On the other hand, a dual role of ethnic media is examined by Wittke (1957) and Marzolf (1979). As summarized by Subervi-Velez (1984, p.39), the Hispanic media in the U.S. have been seen as contributors to Latino assimilation and pluralism. Coverage of the host society in ethnic media can help immigrants know about the dominant culture. These imply that ethnic media can be regarded as a source for seeking host information. As attributional confidence deals with the initial contact between strangers and the host people, the present study presumes the dual role of Chinese media in the U.S. The present research combines the use of both original and host media and their role in attributional confidence.

Familiarity With Host Society

Familiarity with host society is defined here in terms of second language competence and the proportion of years in the U.S. These two variables are categorized as "structural and demographic variables" in Shoemaker et al's research (1985), which may predict acculturation. In examining the effects of perception of membership groups on interpersonal communication, Altman and Taylor (1973) propose that prolonged contact leads to familiarity and intimacy. This implies that the longer individuals reside in a group environment, the more familiar they are with this group.

Immigrants' second language competency can also facilitate their adaptation (Kim, 1981, 1988). For example, host language proficiency is positively related to adaptation to the host society (Chaffee, Nass, and Yang, 1989; Hur and Proudlove, 1982; Kim, 1977a, 1977b, 1981; Kuo and Lin, 1977; Lee, 1984; Ryu, 1977; Subervi-Velez, 1984; Won-doornink, 1988; Yao, 1979), positively related to the diversity of interpersonal communication (Yum, 1982), but negatively related to ethnic cultural and relational ties (Subervi-Velez, 1984). Also, ethnic language proficiency is positively associated with ethnic cultural and relational ties and negatively related to adaptation to the host society (Fong, 1964; Subervi-Velez, 1984).

Besides second language competence, the proportion of one's life spent in the U.S. in the dominant society is an important variable to immigrant participation in the social and mass communication

of the host society (Chaffee, Nass, and Yang, 1989; Hur and Proudlove, 1982; Ryu, 1977; Subervi-Velez, 1984. 1986; Taft, 1957). Studies have shown that immigrants' proportion of years in the U.S. has an effect on their exposure to English-language media (Chaffee, Nass, and Yang, 1989), association with American friends, and the degree of adaptation (Chaffee, Nass, and Yang, 1989; Subervi-Velez, 1984). The relationship with Americans, positively related to the proportion of years in the U.S., will be elaborated by individuals' use of communication strategies in the present study.

Adaptive Motivation

Immigrant motivation, as indicated by Kim, (1981, p.8), refers to an immigrant willingness to learn about, participate in, and be oriented toward the host socio-cultural system. Several aspects of motivation have been studied: (1) their affection of original culture and people (Chaffee, Nass, Yang, 1989; Fong, 1964; Yao, 1979); (2) a positive attitude and desire to learn the host norms, cultures (e.g., norms, religions) (De Fleur and Cho, 1957; Kuo and Lin 1977); and (3) a positive attitude toward making friends with the host people (Berry, 1980, 1988; Kim, 1977, 1988; Kuo and Lin, 1977; Yao, 1979).

The more desire immigrants have to learn the host norms and cultures as well as to get along with the host people, the more they try to adapt to the dominant society. By contrast, the more affection one has about the original culture and people, the less one tries to adapt to the host society. Relevant research projects have defined the dominant people as Caucasian Americans, while the dominant culture has been defined as American or Western culture without considering the composition and influence of other ethnic cultures. As the status of minority is changing, the definition of host culture as well as people should be reconsidered in future study.

MODEL AND HYPOTHESES

Based on the literature review, the research model (see Figure 2 in the Appendix) addresses general relationships of adaptation, attributional confidence, and the use of passive, active, and interactive strategies, familiarity with host society (second language competence and the proportion of years in the U.S.), attitudes toward media, and adaptive motivation. Related hypotheses can be proposed as follows.

Familiarity With Host Society

H-1. Familiarity with host society is positively related to the use of passive strategies (observing Americans, exposure to media).

H-2. Familiarity with host society is positively related to the use of active strategies (asking others about Americans, contacting media organizations about Americans).

H-3. Familiarity with host society is positively related to the use of interactive strategies (face-to-face contact Americans, mediated interpersonal contact Americans).

H-4. Familiarity with host society is positively related to the degree of attributional confidence.

H-5. Familiarity with host society is positively related to the degree of adaptation.

Adaptive Motivation

H-6. Adaptive motivation is positively related to the use of passive strategies (observing Americans, exposure to media).

H-7. Adaptive motivation is positively related to the use of active strategies (asking others about Americans, contacting media organizations about Americans).

H-8. Adaptive motivation is positively related to the use of interactive strategies (face-to-face contact Americans, mediated interpersonal contact Americans).

H-9. Adaptive motivation is positively related to the degree of adaptation.

Attitudes Toward Media

H-10. Positive attitudes toward media are positively related to the frequency of exposure to media (mediated interpersonal passive strategy).

H-11. Positive attitudes toward media are positively related to the frequency of contact with media organizations about Americans (mediated interpersonal active strategy).

H-12. Positive attitudes toward media are positively related to the frequency of mediated interpersonal contact Americans (mediated interpersonal interactive strategy).

H-13. Positive attitudes toward media are positively related to the degree of adaptation.

Uncertainty Reduction Strategies Variables

H-14. The use of passive strategies (observing Americans, exposure to media) is positively related to the degree of attributional confidence.

H-15. The use of active strategies (asking others about Americans, contact with media organizations about Americans) is positively related to the degree of attributional confidence.

H-16 The use of interactive strategies (face-to-face contact with Americans, mediated interpersonal contact with Americans) is positively related to the degree of attributional confidence.

H-17. The use of interactive strategies (face-to-face contact with Americans, mediated interpersonal contact with Americans) is positively related to the degree of adaptation.

Adaptation Variables

H-18. The degree of attributional confidence is positively related to the degree of adaptation.

H-19. The use of face-to-face uncertainty reduction strategies is more related to adaptation than that through mediated interpersonal contact to adaptation.

METHOD

Based on Fong's (1964) and Subervi-Velez's (1984) measurements, adaptation was measured by asking respondents about their experiences in attitudes toward and preferences about life in the United States on a scale from 6 (strongly agree) to 1 (strongly disagree). Scores on all 14 items were then summed to create an index of adaptation. The higher the points, the more adapted the respondent. Z-score was used to standardize the results of the scales. These 14-item had a reliability coefficient (Cronbach's alpha=.78).

Attributional confidence is the degree to which an individual feels he/she can predict and explain another's behaviors, beliefs, and attitudes. Based on Gudykunst and Nishida's (1986) attributional confidence (uncertainty reduction) scale for individualistic and collectivistic cultures, four questions for both individualistic and collectivistic cultures were selected. Respondents were requested to indicate the degree of confidence experience when interacting with Chinese and Americans on a scale of 0-100%, with zero (0) reflecting total uncertainty and 100% representing total attributional confidence. These four-item had a high reliability coefficient (Cronbach's alpha=.98).

Media use was measured using three questionnaire items asking the time respondents spent on contents related to Americans by watching television, reading newspapers, reading the messages in news networks or electronic mail. These five-item had a reliability coefficient (Cronbach's alpha=.73). For the items of mediated interpersonal contact with other Chinese about Americans by telephone or electronic mail, the two-item had a reliability coefficient (Cronbach's alpha=.71). For the mediated interpersonal contact with Americans by telephone or electronic mail, it had a reliability coefficient (Cronbach's alpha=.77). Finally, regression in the path analysis was used to test the hypotheses. The higher the points, the greater the use of uncertainty reduction strategies.

In addition, items traditionally used the interpersonal uncertainty reduction studies were included in the instrument. The six-point items (6=very likely; 1=not likely at all) were used to assess the likelihood of observing Americans, asking other Chinese about Americans, and interacting with Americans. Z-score was used to standardize the results of the scales. For the face-to-face passive strategies, the two-item had a reliability coefficient (Cronbach's alpha=.73). For the face-to-face active strategies, the four-item had a high reliability coefficient (Cronbach's alpha=.90). For the face-to-face interactive strategies, the four-

item had a moderate reliability coefficient (Cronbach's alpha=.85). And then, regression in the path analysis was used to testify the hypothesis.

Based on Shoemaker, Reese, and Danielson's (1985) study, the attitudes toward media were measured by respondents' perception of the need to use media, of the relative benefit of media to different parts of society, and of the degree to which they feel they can influence what is read and watched. Respondents is required to answer these three questions on a six-point scale (6=agree strongly; 1=disagree strongly). Z-score was used to standardize the results of the scales. These three-item had a reliability coefficient (Cronbach's alpha=.81). And then regression was used to test related hypotheses.

Adaptive motivation was measured by the degree of immigrants' desire to learn about, participate in, and be oriented toward the host cultural system on a six-point scales (6=very much; 1=not at all). This study also measures individuals' attitudes toward Spanish to reflect the influence of another ethnic culture on adaptation. The higher the points, the greater the adaptive motivation. Before using regression to test related hypotheses, Z-score was used to standardize the results of the scales. These four-item had a moderate reliability coefficient (Cronbach's alpha=.85).

Based on Subervi-Velez's (1984) research, the proportion of years in the U.S. was defined as the length of time that an immigrant has resided in the host country divided by the immigrant's age.

Second language competence was measured by asking respondents' ability to write, read, understand, and speak English and Mandarin on a six-point scale (6=very well; 1=very poorly). The higher the points, the greater their language proficiency. Z-score was used to standardize the results from the scales. These four-item for English had a high reliability coefficient (Cronbach's alpha=.95). These four-item for Mandarin had a high reliability coefficient (Cronbach's alpha=.97). And then, regression in the path analysis was used to testify the hypothesis.

Sample Selection

In the present study, immigrants are defined as the individuals who were born in one country (in this case, either the People's Republic of China or the Republic of China) and move to another. For most of them, English is a second language; nevertheless, not all of them grew up in China or Taiwan, nor were they all fluent in Mandarin Chinese. The sample was randomly selected from the list of the students,

visiting scholars, and their spouse according to the origin of the country provided by the International Office of the University of Texas at Austin .

Mail Survey and Focus Groups

Prior to the survey, a pre-test was administered to sixteen Chinese students in a face-to-face interview, eight from China, and eight from Taiwan, Because the reliability of the English version was dramatically lower than that of the Chinese version, the version was made to use only the Chinese-language version in the general survey.

As a following to the mail survey, six groups with an average of six participants were conducted in the second stage of survey. Each group was asked the same questions about their length of residing in the U.S. and their initial reactions to life in the U.S. allowing them a chance to talk and adjust to the group. The questions were designed to become more specific as the session progressed. Additional questions were asked as necessary to expand on an issue or probe into an area being discussed.

FINDINGS

In the preliminary stage, questionnaires were sent to 300 respondents from Taiwan and 200 from China. Altogether 383 questionnaires were received in the self-addressed stamped envelops. This represented a response rate of 76.7% . Among these respondents, 250 (83.9%) are from Taiwan and 133 (66.5%) are from China. T-test was used to test the differences of testing variables between the Taiwanese and Mainland groups. Among these variables, there were differences of English proficiency and adaptive motivation between the Taiwanese and Mainland groups. The average English ability of the Mainland group (M=16.5) was higher than that of the Taiwanese group (M=15.3). The scores of five statements measuring adaptive motivation for the Taiwanese group were higher than those for the Mainland group.

Testing the Hypotheses

Regression in the path analysis was used to test the hypotheses. Each of the hypotheses will be taken in turn for the total, Taiwanese, and Mainland groups (See Figure 3, 4, 5).

Effects of Personal Background Variables

H-1 was partially supported (see Table 1). For the total group, English proficiency was positively related to media use ($B=.23$, $p<.001$) but the proportion of years in the U.S. ($B=-.02$, $p<.001$) was negatively related to media use. As shown in Figures 4 and 5, this hypothesis was also partially supported

in the Taiwanese and Mainland groups. For the Taiwanese group, English proficiency (B=.22, p<.001) was positively related to media use but the proportion of years in the U.S. was negatively related to media use (B=-.01, p<.001). For the Mainland groups, English proficiency (B=.28, p<.01) was positively related to media use but the proportion of years (B=-.06, p<.01) in the U.S. was negatively related to media use.

H-2 was not supported for the Taiwanese group, but partially supported for the total and Mainland groups (see Table 1). As shown in Figures 4 and 5, English proficiency (B=-.16, p<.05) was negatively related to the frequency of asking others about Americans, but the proportion of years in the U.S. (B=.04, p<.05) were positively related to the frequency of asking others about Americans for the total group. For the Mainland group, both English proficiency (B=-.20, p<.01) and the proportion of years in the U.S. (B=-.18, p<.01) were negatively related to the frequency of asking others about Americans.

H-3 was partially supported (see Table 1). For the total group, English proficiency (B=.17, p<.01) and the proportion of years in the U.S. (B=.02, p<.01) were positively related to the frequency of interacting with Americans. On the other hand, English proficiency (B=.16, p<.001) and the proportion of years in the U.S. (B=.1, p<.001) were both positively related to the frequency of mediated interpersonal contact with Americans. For the Taiwanese group (see Table 5.6), English proficiency (B=.29, p<.001) was positively related to the frequency of interacting with Americans, but the proportion of years in the U.S. (B=-.06, p<.001) was negatively related the frequency of interacting with Americans. On the other side, English proficiency (B=.17, p<.01) and the proportion of years in the U.S. (B=.1, p<.01) were both positively related to the frequency of mediated interpersonal contact with Americans. For the Mainland group, English proficiency (B=-.12, p<.05) was negatively related to the frequency of interacting with Americans, but the proportion of years in the U.S. (B=.24, p<.05) was positively related to the frequency of interacting with Americans.

H-4 was completely supported that both English proficiency (B=.19, p<.001) and the proportion of years in the U.S. (B=.13, p<.001) were positively related to attributional confidence for the total group. For the Taiwanese group, both English proficiency (B=.2, p<.001) and the proportion of years in the U.S. (B=.13, p<.001) were positively related to degree of attributional confidence. However, it was

not supported for the Mainland group. The distinction between the Taiwanese and Mainland groups will be examined in the results of focus groups.

H-5 was completely supported (see Table 1). For the total group, both English proficiency (B=.31, p<.001) and the proportion of years in the U.S. (B=.11, p<.001) were positively related to the degree of adaptation. For the Taiwanese group, English proficiency (B=.27, p<.001) and the proportion of years in the U.S. (B=.12, p<.001) were positively related to the degree of adaptation. For the Mainland group, English proficiency (B=.33, p<.01) and the proportion of years in the U.S. (B=.12, p<.01) were positively related to the degree of adaptation.

H-6 was partially supported (see Table 2). Adaptive motivation was positively related to the frequency of observing Americans for the total group (B=.18, p<.01). For the Taiwanese group, adaptive motivation was positively related to the use of face-to-face (B=.27, p<.05).and mediated interpersonal passive strategies (B=.14, p<.05). However, it was not supported for the Mainland group.

H-7 was partially supported for the total (B=.13, p<.05) and the Taiwanese groups (B=.17, p<.05) that the adaptive motivation was positively related to the frequency of asking others about Americans. However, this hypothesis was not supported for the Mainland group (see Table 2).

H-8 was partially supported for the total (B=.17, p<.01) and Taiwanese groups (B=.25, p<.001) that the adaptive motivation was positively related to the frequency of face-to-face contact with Americans. However, this hypothesis was not supported in the Mainland group (see Table 2).

H-9 was completely supported for the total (B=.31, p<.001), Taiwanese (B=.29, p<.001), and Mainland groups (B=.49, p<.001) that the adaptive motivation was significantly related to adaptation (see Table 2).

H-10, **H-11**, and **H-12** were not supported for the total, Taiwanese, and Mainland groups (see Table 3). These nonsignificant relationships will be discussed in the results of focus groups. These nonsignificant relationships will be discussed in the results of focus groups.

H-13 was supported for the total (B=.12, p<.05) and Taiwanese groups (B=.17, p<.05) that positive attitudes toward media was positively related to adaptation. However, this hypothesis was not supported for the Mainland group (see Table 3). This nonsignificant relationship will be discussed in the results of focus groups.

Effects of Uncertainty Reduction Strategy Variables

H-14 was not supported for the total nor Mainland groups. As shown in Table 4, it was completely supported for the Taiwanese group. Both the frequency of exposure to media (B=.04, p<.05) and contacting with media organizations about Americans (B=.17, p<.05) were positively related to attributional confidence.

H-15 was not supported for the total, Taiwanese, nor Mainland group (see Table 4).

H-16 was completely supported that both the frequency of interacting with Americans (B=.19, p<.001) and that of mediated interpersonal contact with Americans (B=.06, p<.001) were positively related to the degree of attributional confidence. For the Taiwanese group, the frequency of interacting with Americans (B=.2, p<.001) and that of mediated interpersonal contact with Americans (B=.15, p<.001) were both positively related to the degree of attributional confidence. For the Mainland group, this hypothesis was not supported (see Table 4).

H-17 was completed supported that the frequency of interacting with Americans (B=.28, p<.001) and that of mediated interpersonal contacting with Americans (B=.12, p<.001) were both positively related to the degree of adaptation for the total group. For the Taiwanese group, the frequency of interacting with Americans (B=.27, p<.001) and that of mediated interpersonal contact with Americans (B=.19, p<.001) were both positively related to the degree of adaptation. For the Mainland group, the frequency of interacting with Americans (B=.26, p<.05) was positively related to the degree of adaptation but the frequency of mediated interpersonal contact with Americans (B=-.02, p<.05) was negatively related to the degree of adaptation (see Table 4).

H-18 was completed supported for the total (B=.21, p<.001), Taiwanese (B=.19, p<.001), and the Mainland groups (B=.22, p<.05) that the degree of attributional confidence was positively related to that of adaptation (see Table 5).

H-19 was totally supported for the total group that the use of face-to-face uncertainty reduction strategies (B=.31, p<.001) had a greater impact than that of mediated interpersonal uncertainty reduction strategies (B=.19, p<.01). As Table 5 shown, it was also supported for the Taiwanese group that the use of face-to-face uncertainty reduction strategies (B=.32, p<.001) exerted a greater impact than that of mediated interpersonal uncertainty reduction strategies (B=.25, p<.001). For the Mainland group, the use

of face-to-face uncertainty reduction strategies (B=.26, p<.05) also exerted a stronger influence on that of mediated interpersonal uncertainty reduction strategies (B=.05, p=.65).

Results of Focus Groups

As a following to the mail survey, six focus groups with an average of six participants were conducted from February 26 to February 29 1992. Two groups, one Mainland and one Taiwanese groups, were composed of newcomers who had been in the U.S. for only two to six months. Two groups, one Taiwanese and Mainland groups, were composed of oldcomers who had been in the U.S. for three to seven years. Two groups, one Taiwanese and Mainland groups, were composed of both oldcomers and newcomers in the U.S. The discussion for each section are summarized as follows.

First, with regard to the first impression in the U.S., the participants cited a number of factors with four characteristics mentioned most often. These were the natural environment, people and cultures, media, as well as personal factor. Newcomers from Taiwan with the average of six months residing in the U.S. were concerned about the difference of the natural environment between America and Taiwan. Both new and oldcomers from Taiwan were concerned about contact between Chinese and Americans. Some participants from China were especially impressed by the neatness of American restrooms. All participants also mentioned that first impressions may be misunderstood. For example, three participants from Taiwan got the first impression that Americans were honest people but changed their minds later. On the other hand, some participants emphasize that the sense of isolation or loneliness in the initial stage of immigration affected their first impression in the U.S.

Second, as for learning about American life, participants considered interpersonal channel, media use, and travel the most important factors in learning about life in America. They also considered how to improve their English proficiency and the degree of self-confidence in order to be adapted in the host society. Many participants from Taiwan and China considering media use said they would use English-language media, if they had enough time and English ability. They often watch English-language television programs while cooking meals. They generally do not consider exposure to Chinese-language media as a useful source of information about Americans.

On the other hand, some participants said that it was the inaccessibility of Chinese-language television programs and electronic mail which affected their use of Chinese-language television programs

or E-mail. They admitted that if Chinese-language media were accessible and knew how to access E-mail, they would use them for convenience. Even accessing the computer news networks, participants from China said they were only concerned with issues related to China such as the Tienanmen Massacre. With regard to interpersonal communication, participants from both China and Taiwan said that they forced themselves to learn actively about American people and cultures. Most of the participants from China also emphasized they are not interested in adjusting to American culture but knowing about the culture.

Third, the most useful way to learn about American life, participants from both Taiwan and China addressed two main factors: interpersonal contact and media use. Interpersonal contact not only occurred when interacting with a host family, officemates, classmates, students, roommates or professors, but also the salespersons in yard sale and the cowboys and cowgirls of nightclub. In general, most of the participants said interacting with Americans directly was more helpful than media use to adapt to the society. Only a few Chinese students said they preferred media use, because they did not feel comfortable dealing with Americans directly.

Fourth, the factors that affect participants' attitudes toward adaptation include: English proficiency, Americans' attitudes, and several psychological reasons. Most participants from China and Taiwan valued the importance of English proficiency in the process of adaptation. Some from China also emphasized that Americans' attitudes toward themselves would encourage their interaction with Americans and desire to learn about American culture. On the other hand, some participants from Taiwan and China also mentioned psychological barriers and high self-dignity would affect their attitudes and behaviors about adaptation.

Fifth, in Chinese context, attributional confidence could be categorized as habit, security, survival, English ability, combination of confidence, comfort, and familiarity. Some participants from Taiwan and China defined attributional confidence as the combination of confidence, comfort, and familiarity. Participants from China, trying to stay in the U.S. as long as possible, regarded it as survival, English ability, or security. Few newcomers from Taiwan addressed that it is regarding habit or security. The concepts to increase attributional confidence from Chinese viewpoints consist of: escape, ask and practice, build self-confidence, and get financial support. Participants from China were concerned about financial

support, because most of them cannot afford to live in the U.S. Few participants from Taiwan tried to reduce uncertainty by escape, these participants only plan to study in the U.S. less than two years.

Sixth, with regard to the negative or insignificant relationship between English proficiency and active strategies, most participants from China and Taiwan indicated that the better their English ability, the more they interacted with Americans rather than asked other Chinese about Americans. They also pointed out they forced themselves to seek information actively about Americans the first several semesters. As time went by, they did not regard being accepted by American friends as an important way to judge their adaptation. Therefore, oldcomers are not so active as newcomers.

On the other hand, participants from Taiwan and China explained that adaptive motivation may not be the major factor to influence individuals' interaction with Americans or other Chinese. Also, most of the Mainland participants emphasized their cultural background and the old age (most people had worked for several years and then to study abroad) have affected their adaptive motivation for the American culture. This is consistent with the finding of the mail survey that the average means of adaptive motivation for the Mainland group were significantly lower than those for the Taiwanese group.

As for the insignificant effects of attitudes toward media, upon related variables, participants from both Taiwan and China mentioned that they use media for relaxation or learn about English, which is not related to their attitudes toward media.

Finally, participants all agreed that the relationship between Chinese and Americans should take regional customs, language ability, and personality into account. Those who are from Taiwan indicated that the more open-minded one is, the more he/she can learn about American life through daily life. Those who are from China also emphasized that they were concerned how to make a living in the U.S. instead of adapting to the society.

DISCUSSION

Comparing the results of this study with past research is important yet difficult, especially because of the many dissimilarities of the specified measures and methodologies. However, some of the more general conclusions of past works do compare favorably - and others do not compare favorably - with the findings stated herein.

On the supportive side, the data were in general agreement with past studies - be they about Asian (e.g., Fong, 1964; Kim, 1977a, 1979; Kuo and Lin, 1977; Lee, 1984, Yao, 1979), or other ethnics (e.g., Chance, 1965; Church, 1982; Jeffres, 1983; Subervi-Velez, 1984) - indicating the positive influence of English proficiency and adaptive motivation on adaptation. There is also agreement between the study and others (e.g., Gao and Gudykunst, 1991; Gudykunst and Hammer, 1988; Gudykunst and Nishida, 1984a, 1984b; Kim, 1979) that pointed out the link between interpersonal contact and adaptation. In this study, the linkage was particularly evident regarding Mainland Chinese and Taiwanese contact with Americans.

On one hand, only partial support can be given to the conclusions about the relationships between several personal background variables and uncertainty reduction strategy variables. These were also indirectly consistent with previous studies (e.g., Kim, 1977a, 1977b; Shoemaker, Reese, and Danielson, 1985; Subervi-Velez, 1984). Take familiarity with host society for instance. English proficiency exerted a positive effect on media use in both Taiwanese and Mainland groups, but a negative effect on the frequency of asking other Chinese about Americans. As shown in the results of focus groups, participants from both China and Taiwan reported that they would not ask other Chinese about Americans, unless their English was poor.

On the other hand, the proportion of years in the U.S. was negatively related to media use only for the total and Taiwanese groups. It was also negatively related to the use of interactive strategies for the Taiwanese group. In the focus group discussion, several oldcomers from China said that the longer they stayed in the U.S., the more they desired to live with Chinese. However, going back to China was their last choice. Therefore, they would read Chinese-language newspapers, messages related to Chinese in news networks. Participants from both Taiwan and China emphasized that they tried to get any chance to interact with Americans or use media in order to learn about American life in the initial stage. After the second or third year of their immigration, they tended to be confident of their life in the U.S. and became less interested in the chance to communicate with Americans.

Past statements about the relationship between adaptive motivation and interpersonal contact also were qualified support for the present study. As can be observed in the results of mail survey, these two variables were positively correlated in the Taiwanese group, but not in the Mainland group. According to the results of focus groups, the participants from China regarded survival in the U.S. as the most urgent

issue for them. They also indicated that adaptive motivation was one thing, but getting along with Americans is another. Their relationships with Americans were also influenced by Americans' attitudes toward foreigners.

With regard to the association of attitudes toward media with the use of uncertain reduction strategies, it was not supported in either Mainland or Taiwan groups in the preliminary survey. This was not consistent with Shoemaker, Reese, and Danielson's (1985) finding that attitudes toward media are related to media use. According to the result of focus groups, most participants from Taiwan and China mentioned they were surprised at the diversity of American media when first coming to the States. They tried to use media to learn about American life the first several months and then gave up, because of the lack of time. On the other hand, some participants from both regions said that the sensational and dramatic contents of American media made them doubt their reality related to American life.

Turning to the discussion of results about media use and the use of face-to-face or mediated interpersonal uncertainty reduction strategies as well as their roles in attributional confidence, the data allowed for some qualified support of the general conclusions of some of the works cited in the literature review. First, the present results were in agreement with past assessments that the use of interactive strategies - interacting with Americans - was positively related to attributional confidence. (Berger and Calabrese, 1975; Gudykunst and Nishida, 1984a, 1984b). The qualification stemming from the present study was that, with controls for personal background variables, this held true for all the Mainland Chinese and Taiwanese.

Second, there was also agreement with Berger and Calabrese (1975) and Gudykunst and Hammer (1988) that the use of passive strategies - observing Americans without intrusion - was positively related to attributional confidence. This was only supported in the Taiwanese group. Why was it not supported in the Mainland group? According to the results of focus groups, participants from China pointed out that they would interact with Americans, instead of observe Americans, to reduce their uncertainty.

Third, Berger and Calabrese (1975) as well as Gudykunst and Hammer (1988) propose that the use of active strategies - asking others about Americans - is positively related to attributional confidence. However, familiarity with host society was not related to the use of active strategies for either the Mainland or Taiwanese groups. Participants of focus groups from both Taiwan and China pointed out that they

would ask other Chinese about Americans only when first coming to the States. They tended to use passive and interactive strategies to reduce their uncertainty about Americans.

Comparing the effects of mediated, mass media and interpersonal communication on adaptation, the latter exerted a stronger influence than others on adaptation in the total, Taiwanese, and Mainland groups. This finding was consistent with other research on diffusion of innovation (Rogers, 1983) and communication channels (Chaffee and Mutz, 1988), that interpersonal channel is more influential than mediated channel in bringing about change. This implies that those who use face-to-face channels are more adapted than those who use mediated channels.

Previous studies on Chinese immigrants regard those who are from China and Taiwan as one total group, which paid less attention to the similarities or differences between Chinese from two different political systems. The present work used both quantitative and qualitative methods to examine Chinese immigrants' adaptive experiences. Obviously, there were many differences between Mainland Chinese and Taiwanese immigrants regarding their adaptation and communication. To the Taiwanese, attributional confidence was the feeling of confidence, familiarity, or security; to the Mainland Chinese, a feeling of survival or making a living in the U.S. With regard to uncertainty reduction strategies, the use of passive, active, and interactive strategies can affect the degree of attributional confidence for the Taiwanese group, but not for the Mainland group. Mainland participants of focus groups said that they would interact with Americans in order to learn or practice English but not for learning about American life.

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Figure 2 Research Model

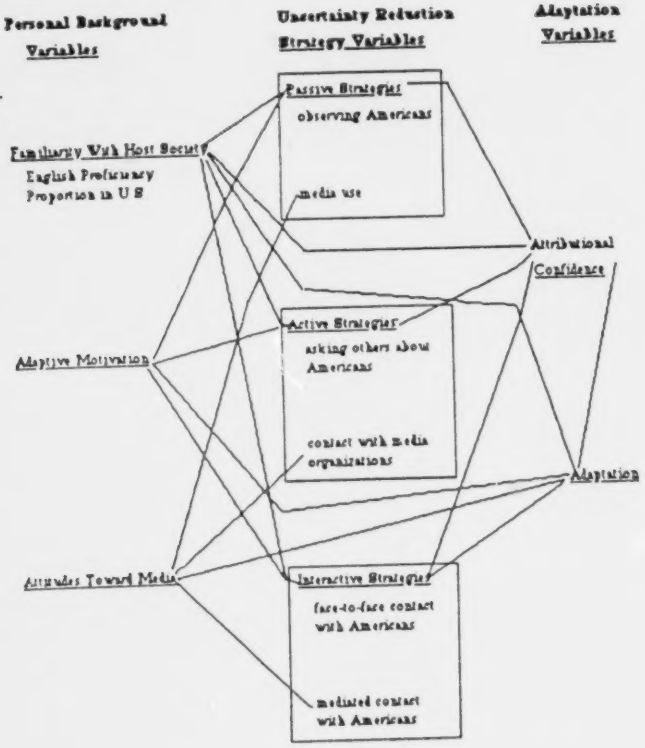

Figure 3 Path Model for the Total Sample

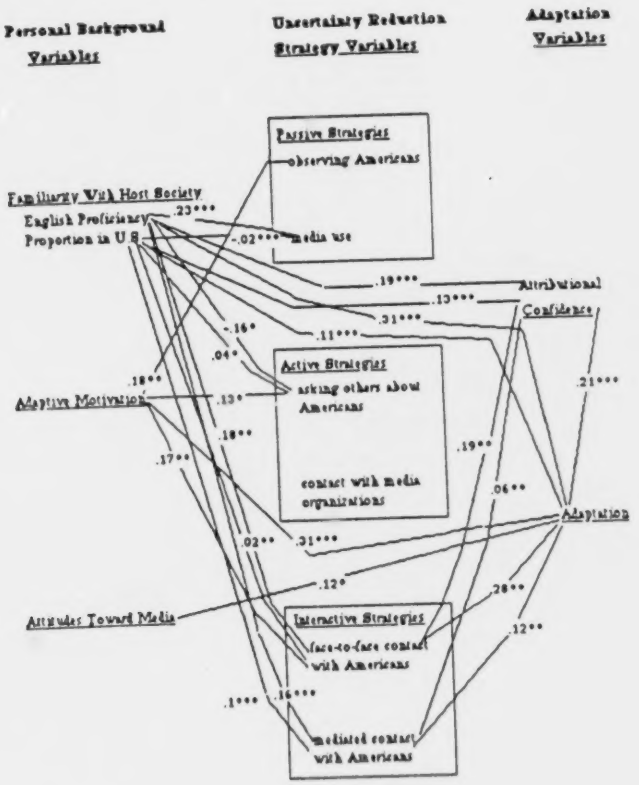

Figure 4 Path Model for the Taiwanese Sample

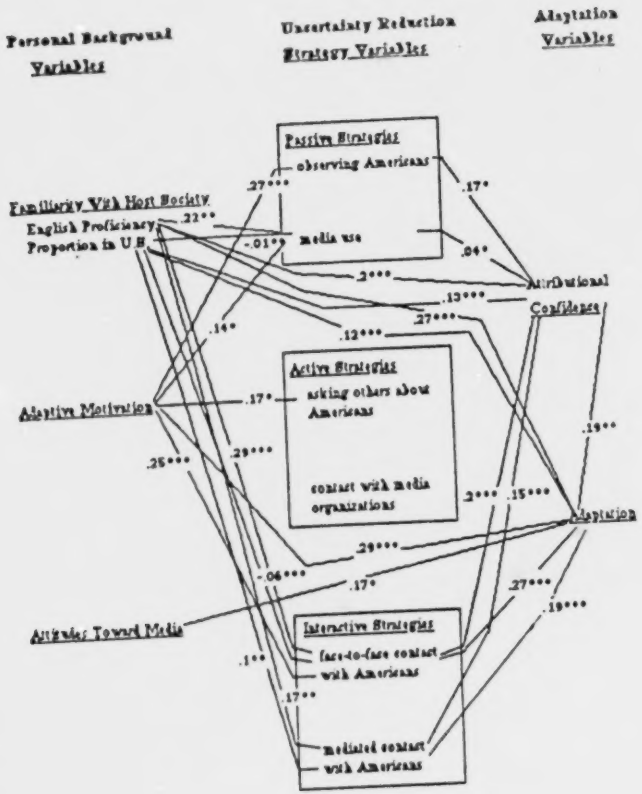

Figure 5 Path Model for the Mainland Sample

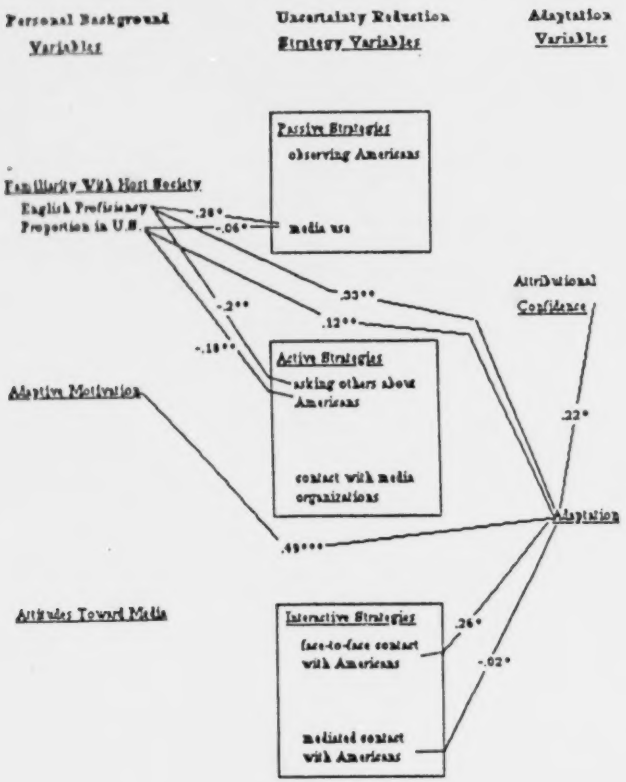

Table 1 Path Regression Coefficient for the Total, Taiwanese, and Mainland Groups: Familiarity Vars With Uncertainty Reduction Strategies & Adaptation Vars

	Coefficient (B) Total Group	Signif F	(B) Taiwanese Group	Signif F	(B) Mainland Group	Signif F
Media Use						
English proficiency	.231		.216		.275	
Proportion in the U.S.	-.019	.000***	-.010	.004**	-.064	.014*
Observing Americans						
English proficiency	.082		.134		-.003	
Proportion in the U.S.	.048	.148	-.018	.092	.119	.453
Contact Media Organizations						
English proficiency	.127		.077		.202	
Proportion in the U.S.	-.062	.138	-.081	.383	.016	.088
Asking Others About Americans						
English proficiency	-.159		-.121		-.204	
Proportion in the U.S.	.036	.015*	.092	.136	-.180	.005**
Mediated Interpersonal Contact						
English proficiency	.159		.171		.121	
Proportion in the U.S.	.097	.000***	.095	.002**	.126	.128
Interacting With Americans						
English proficiency	.171		.292		-.120	
Proportion in the U.S.	.020	.002**	-.057	.000***	.236	.033
Attributional Confidence						
English proficiency	.194		.199		.184	
Proportion in the U.S.	.126	.000***	.132	.000***	.098	.079
Adaptation						
English proficiency	.309		.271		.325	
Proportion in the U.S.	.107	.000***	.124	.000***	.118	.002**

*p<.05; **p<.01; ***p<.001

Table 2 Path Regression Coefficient for the Total, Taiwanese, and Mainland Groups: Adaptive Motivation With Uncertainty Reduction Strategies & Adaptation Vars

	Coefficient (B) Total Group	Signif F Total Group	(B) Taiwanese Group	Signif F Taiwanese Group	(B) Mainland Group	Signif F Mainland Group
Passive Strategies						
Observing Americans						
Adaptive motivation	.182	.002**	.267	.000***	.016	.881
Media Use						
Adaptive Motivation	.111	.055	.138	.045*	.052	.622
Active Strategies						
Asking Others About Americans						
Adaptive motivation	.134	.020*	.173	.012*	.041	.700
Contact Media Organizations						
Adaptive motivation	.045	.436	.100	.149	-.035	.739
Interactive Strategies						
Interacting With Americans						
Adaptive motivation	.174	.003**	.247	.000***	.089	.400
Mediated Interpersonal Contact						
Adaptive motivation	.025	.666	.095	.168	-.071	.501
Adaptation						
Adaptive motivation	.310	.000***	.293	.000***	.489	.00***

*p<.05; **p<.01; ***p<.001

Table 3 Path Regression Coefficient for the Total, Taiwanese, and Mainland Groups: Attitudes Toward the Media With Uncertainty Reduction Strategies & Adaptation Vars

	Coefficient (B) Total Group	Signif F Total Group	(B) Taiwanese Group	Signif F Taiwanese Group	(B) Mainland Group	Signif F Mainland Group
Media Use						
Attitudes toward media	.060	.270	.044	.494	.089	.347
Contact Media Organizations						
Attitudes toward media	.090	.094	.055	.399	.151	.107
Mediated Interpersonal Contact						
Attitudes toward media	.070	.195	.040	.538	.056	.549

*p<.05; **p<.01; ***p<.001

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Table 3 (continued) (*p<.05; **p<.01; ***p<.001)

	Coefficient (B) Total Group	Signif F	(B) Taiwanese Group	Signif F	(B) Mainland Group	Signif F
Adaptation						
Attitudes toward media	.122	.035*	.170	.014*	.019	.861

Table 4 Path Regression Coefficient for the Total, Taiwanese, and Mainland Groups: Uncertainty Reduction Strategy Vars With Attributional Confidence

Attributional Confidence	Coefficient (B) Total Group	Signif F	(B) Taiwanese Group	Signif F	(B) Mainland Group	Signif F
Passive Strategies						
Media Use	.034		.041		-.016	
Observing Americans	.120	.085	.165	.039*	.018	.975
Active Strategies						
Contact media organizations	-.091		.006		-.154	
Asking about Americans	-.047	.183	-.106	.315	-.061	.279
Interactive Strategies						
Mediated interpersonal contact	064		.154		-.120	
Interacting with Americans	.194	.001**	.200	.000***	.133	.264
Mediated interpersonal strategies	.061	.261	.115	.079	-.070	.480
Face-to-face strategies	.149	.006**	.165	.012*	.122	.257

*p<.05; **p<.01; ***p<.001

Table 5 Path Regression Coefficient for the Total, Taiwanese, and Mainland Groups: Uncertainty Reduction Strategy Vars With Adaptation

Adaptation	Coefficient (B) Total Group	Signif F	(B) Taiwanese Group	Signif F	(B) Mainland Group	Signif F
Interactive Strategies						
Mediated interpersonal contact	.120		.194		-.015	
Interacting with Americans	.283	.006**	.269	.000***	.263	.040*
Attribution Confidence	.205	.000***	.193	.005**	.221	.037*
Mediated interpersonal strategies	.189	.001**	.250	.000***	.048	.652
Face-to-face strategies	.310	.000***	.324	.000***	.264	.012*

*p<.05; **p<.01; ***p<.001

The Impact of Competition and Group Ownership on All-News Radio

by

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During the 1980s, media economics research boomed,[1] primarily concentrating on the impact of ownership and competition on newspaper and local television news content and operations. The economics of radio news remained essentially unexplored. This study examines the impact of competition and ownership on all-news radio stations, using past newspaper and television studies as a basis for hypothesizing specific relationships.

Literature Review

Because of the scarcity of research on radio news competition, studies of newspaper and local television news competition and ownership will be reviewed, followed by a review of general research about radio news and economic theory.

Competition and Ownership

Most pre-1984 research into newspaper competition found little impact on content,[2] with some notable exceptions.[3] By the mid-1980s, however, two national studies had found that intense intracity daily newspaper competition resulted in greater commitment of organizational resources to the newsroom in the form of a larger newshole, more wire services, and more reporters for a given amount of space in the newshole.[4] Litman and Bridges called these relationships the "financial commitment theory."[5]

Research since the mid-1980s has tended to support the financial commitment theory, although the degree of support has varied. Studies have found a relationship between intracity daily newspaper competition and number of Pulitzer Prizes won,[6] total pages in a newspaper,[7] increased use of graphics and color by newspapers,[8] diversity of coverage,[9] number of wire services carried by newspapers,[10] and international coverage in Canada.[11]

Not all studies have shown competition leading to increased resource allocation,[12] although most of the studies that failed to support financial commitment suffered from limited samples, failure to examine financial commitment dependent variables, and use of nominal measures of competition.[13]

The bulk of newspaper competition studies have dealt with intracity competition between dailies. However, research into intercity daily newspaper competition has found that such competition increased newsholes and the percentage of space devoted to local coverage[14] and reduced reporter work load, which in turn increased balance in news stories.[15]

Research on local television news has also shown a relationship between competition and financial commitment in the form of greater expenditures on local news,[16] more minutes of local programming and local news,[17] more full-time staff and bigger newsroom budgets,[18] more stations with satellite newsgathering vehicles,[19] and more resources used to assemble stories on local news program.[20]

In summary, studies of both newspaper and local television news competition indicate that competition can lead to a greater expenditure on the newsroom and increased local coverage.

Despite mixed results, the majority of research on ownership's impact on newspaper news content suggests little <u>systematic</u> difference between group-owned and independent newspapers.[21] Research on television group ownership also has found little or no impact on local television news content.[22]

The lack of systematic impact notwithstanding, several case studies of individual newspaper groups have found an impact of

ownership on content (e.g. the coverage of Gary Hart's escapades).[23] Overall, a particular owner may affect content but there is little systematic relationship between being group owned and the nature of news content in newspapers and local television news.

Radio News Research

Very little research has addressed the economics of radio news, let alone the impact of competition. Shaw and Riffe studied 38 all-news (or nearly all-news) radio stations in 1977 and 1979.[24] Managers at these stations generally believed group ownership or local affiliation with another "sister station" was crucial to the success of a news format. No consensus was found about the best mix of hard and soft news within that format, but there was general agreement that radio must emphasize local news.

Riffe and Shaw used a more systematic approach in a follow-up study published in 1990.[25] They concluded that news radio stations tended to emphasize local, hard news and that, while the extent of news programming increased with size of market, the news format could succeed outside of larger markets. They also reported that group-owned stations broadcast more news. Finally, They found no relationship between radio-print cross-ownership and the amount of news.

However, Nestvold looked at the impact of cross-ownership of radio stations and newspapers in the same market and found that cooperation among the newspaper and news radio staffs was greater in smaller markets than in larger markets because of the limited staff size of smaller market stations.[26] Stempel later supported the impact of cross-ownership on radio news in smaller cities.[27]

Economic Theory

Because of the limited body of research about radio news economics, it is difficult to predict the impact of competition and ownership on all-news radio. In addition, radio market structure, which affects competition, differs from that of newspapers and local television news. Given such differences, the financial commitment theory might not be applicable in media markets with more firms than found in newspaper and local television news markets.[28]

How should radio market structure be characterized?

Most news media fall into two types of markets: oligopolies with product competition, or monopolistic competition. The first type has few firms that tend to compete more through the nature of their products than through price, although price can affect demand. Monopolistic competition has many firms that tend to reduce the number of directly competitive firms by differentiating themselves from most competitors. This differentiation can take the form of location, advertising or product variation.[29]

Daily newspapers tend to be either quasi-monopolies or oligopolies with product competition. A quasi-monopoly is a market with one daily newspaper, but that contains other media firms, which are poor substitutes.[30] An oligopoly market contains only two or three daily newspapers.

In general, oligopolies can be competitive or they can eliminate competition through purposeful or de facto collusion. However, daily newspapers with direct competition tend not to collude because the circulation spiral will force one of the

newspapers out of business.[31] Thus, newspapers in the same market compete to survive.[32]

Local television markets traditionally have been oligopolies,[33] but the introduction of cable has increased the number of sellers for entertainment programming and is moving the market structure toward monopolistic competition.[34] However, the transition to monopolistic competition for local television news is incomplete.

Most radio markets tend to have several stations, as many as 50 in larger markets, which places radio competition under the heading of monopolistic competition. These stations differentiate themselves by broadcasting certain types of music, "talk" or, in some cases, providing "all-news all the time." Depending on the size of the market, some of these niches will have more than one station and some will not.

All-news radio stations compete within a niche for some listeners, those who are particularly attracted to news, but they also compete with all stations for other listeners, those not as devoted to news, and for advertising.

Hypotheses and Rationale

The question underlying this study is: Are the relationships found in newspaper and local television news research applicable to radio news competition and ownership? Our goal is to answer this question, but with a very real understanding that the results for all-news radio may differ markedly from newspaper and local television news findings because of differences in market structures.

This study will test four hypotheses:

1. The presence of a competing news/talk station in a market will increase a station's fulltime staff, number of reporters, number of network feeds, hours of news and hours of staff-prepared news.

This hypothesis is derived from the financial commitment research on intracity daily newspapers and local television news competition. These five variables reflect the amount of resources committed to the newsroom.

2. The presence of a competing news/talk station in a market will increase the percentage of all time devoted to local news, the percentage of staff news that is local, and the percentage of news that is staff-prepared.

This hypothesis is derived from research about intercity newspaper competition, which has found that competition increases the percentage of newshole given to local news. The local emphasis is an effort to differentiate the local newspaper from other newspapers that have entered the market.

3. Group ownership will result in larger fulltime staffs, more reporters, more network feeds, more hours of news, and more hours of staff-prepared news.

4. Group ownership will result in a greater percentage of all time devoted to local news, a greater percentage of staff news that is local, and a greater percentage of news that is staff prepared.

The majority of research about ownership has found little or no impact of group ownership on newspapers and local television news. However, because research dealing specifically with radio news has suggested a relationship between group ownership and

success of radio news,[35] these hypotheses will be tested.

Method

A secondary analysis was conducted using 1986 survey[36] data on "all-news" radio stations listed in the Broadcasting Yearbook.[37] Non-survey data from printed sources were also used. The yearbook's listing of 293 all-news stations served as a mailing list for the 1986 survey, though other yearbook data revealed that most stations also programmed some non-news (sports, talk, etc.). Twenty-seven stations were excluded from the original list based on yearbook data.[38]

Of the remaining 266 stations, 174 (65%) responded--28 to report they were not news stations. Programming and staffing data were obtained from 146 news stations, 55% of the mailing's 266 stations but 61% of the "corrected" population.

Non-survey ownership and market data were taken from the then-current Broadcasting Yearbook. Market size was measured by the population of the station's county or metropolitan market if more than one county was in the market, based on Census data and Standard Rate and Data Service figures.

Thirty-eight stations in the survey reported 100% of their airtime was devoted to news, and 45 reported between 50% and 99% of airtime was news.[39] These 73 stations were used to test this study's hypotheses, because their focus on news makes them more comparable to newspapers and local television news departments than would radio stations with less that 50% news content.

Radio competition was determined by examining yearbook data on formats of other stations in the markets.[40] If two or more stations listed news, news-talk, or talk-variety formats, the

test station was judged to be in a competitive market.

Competition was measured as a dichotomous variable (yes/no) for two reasons. First, even the largest markets, New York and Los Angeles, had only six news stations, and only six other markets had more than two. So, raw number of competing stations, used in local television studies,[41] did not seem appropriate because the distribution of data would have been greatly skewed by very large markets. Second, the comparative proportion of listeners for test stations, which would be similar to an index used in newspaper and local television news studies,[42] could not be calculated because reports on listener shares for all the markets were unavailable for 1986.

Least-squares multiple regression analysis was used. Group ownership and competition were dummy variables. Two control variables were used: market size and proportion of time devoted to news. Market size, a conventional control variable in studies of competition,[43] was a surrogate for available resources; larger markets generate more advertising revenues than smaller markets. Proportion of time devoted to news was determined from two questionnaire items[44] and was used as a control variable because airing more news requires more resources.

Two groups of dependent variables also were taken from the questionnaire responses: financial commitment, reflecting expenditure of money, and the nature of content. Financial commitment variables included number of fulltime staff, number of reporters, total network and service feeds, hours of news during the week, and hours of staff-prepared news. Content variables included percentage of all news hours devoted to local news,

percentage of time devoted to staff reports, and the percentage of staff news that was local.

The data were examined for violations of regression assumptions. First, one large-market station with four times the staff of the next largest station and twice the number of reporters, was dropped from analysis because of the inordinate influence of such outliers in regression analysis.[45] Second, the correlation matrix revealed no correlations among independent variables that suggested a multicollinearity. However, number of news hours per week, a dependent variable, and proportion of time devoted to news had a correlation of .90 because hours of news is the numerator in proportion of time devoted to news.[46] Thus, proportion of news was dropped as an independent variable in the one regression equation that used hours of news per week as the dependent variable. Variable skewness did not affect regression results.[47]

In addition, the standardized predicted values were plotted against standardized residuals to check for violation of the normality, homoscedasticity and linearity assumptions. The plots showed no suspicious patterns, though the relatively small sample size makes scatterplots difficult to interpret.

Two further checks for the assumption of linearity were conducted on the data. First, all non-dummy variables were transposed to natural logarithms and regressions were run.[48] Second, the independent variables were multiplied in all possible combinations to test for interactive effects.[49]

For all but two dependent variables, using natural logs and interaction independent variables failed to increase R^2, which

supports the linearity assumption. But after the logarithmic transformations, the R^2 increased for the regressions with hours of news during the week and percentage of all news hours devoted to local news as dependent variables.

The non-linear nature of these two equations resulted from interaction among competition and two other independent variables. The interaction effects will be examined in the results section.

The number of cases actually used in the regression analysis varied for the dependent variables because of missing data (the largest N was 68 and the smallest was 57), but the ratio of cases to variables ranged from 14:1 to 17:1, which was acceptable.[50]

The analysis below reports beta weights, statistical significance levels, and the amount of unique variance in the dependent variable accounted for by an individual independent variable. The unique variance was calculated by squaring the part correlation (also called semi-partial correlation) between the dependent and independent variables.[51] All R^2 figures have been adjusted for sample size.

Results

Results for the regression analyses are reported in Table 1. Of the financial commitment variables, the regression equations accounted for none of the variance in total number of network feeds, 11% of variance in hours of news per week, 39% of variance in number of reporters, 55% of variance in fulltime staff, and 56% of variance in hours of staff-prepared news. Among content variables, the regression equations accounted for 14% of the

variance in time devoted to local coverage, 18% of staff news time devoted to local coverage, and 27% of news time devoted to staff reports. Overall, the most influential independent variable was market size, which was statistically significant for four variables. It was associated uniquely with 23% of variance in fulltime staff, 19% of variance in number of reporters, 4% of variance in hours of staff-prepared news, and 11% of variance in percentage of time devoted to local news.

INSERT TABLE 1 ABOUT HERE

Hypothesis 1, that the presence of a competing all-news station in a market would increase the staff size, number of reporters, number of network feeds, hours of news, and hours of staff- prepared news, was supported only for hours of staff-prepared news (beta for competition was .411, significant at the $p < .001$ level). Competition was associated uniquely with 9.7% of the variance in hours of staff-prepared news.

Hypothesis 2, that competition would increase the percentage of time devoted to local news, the percentage of staff news given local coverage, and the percentage of news that was staff-prepared, was not supported. However, a significant negative relationship was found between competition and percentage of staff-prepared news devoted to local coverage (beta equalled -.548, significant at the $p < .001$ level). Competition was associated uniquely with about 17% of the variance in staff-prepared news devoted to local coverage.

As predicted, a positive relationship was found between competition and percentage of news time given to staff reports (beta equalled .287, significant at the $p < .05$ level).

Competition was associated uniquely with just under 5% of the total variance in news time devoted to staff reports.

Hypotheses 3 and 4, predicting that group ownership would be positively related to financial commitment and content variables, were not supported. No statistically significant relationships ($p < .05$) were found between group ownership and any dependent variables.

As noted, interaction among proportion of all time given news, market size and competition was related to proportion of all time given local news and to total hours of news. However, the difference between the R^2 for the original equation and R^2 for equations with interaction was marginal for hours of news, increasing from 11% to about 15%.

The impact of interactions on proportion of all time given local news was much more dramatic. The R^2 increased from 14% in the original equation to almost 50% with interaction variables. However, interpreting the impact of interactions was difficult because of the high multicollinearity among the four interaction variables, which were calculated by multiplying competition, market size and proportion of time devoted to news in the four possible combinations.[52]

To solve this multicollinearity problem, separate regression equations were run for each of four interaction variables. The equations also included the original variables if their correlations with the interaction variables were less than .9. The four interaction variables and the R^2 associated with their regression equations were: competition and proportion of time devoted to news (.48%); competition and market size (.46%);

market size and proportion of time devoted to news (.49%); and competition, market size and proportion of time devoted to news (.48%). The only interaction variable that was not significant ($p < .05$) was competition and proportion of time devoted to news.

In an effort to better understand the interaction, the unique variance shared by the interaction variables and dependent variable (proportion of time devoted to local news) was calculated. The following are the interaction variables and the percentage of variance shared: market size and competition (10.4%); market size and proportion of time given news (23.4%); and market size, proportion of news and competition (12.1%).

It appears that the interaction of market size and proportion of all time given news was the important interaction variable affecting local news time. This interaction variable had the highest R^2 associated with its equation and the highest part correlation of the four interactive variables tested.

Conclusions

Group ownership had no impact on either financial commitment or local and staff emphasis of news coverage in all-news radio, a finding consistent with much of the research on ownership's impact on local television news and newspapers. Nor did group ownership interact with other variables. However, this does not mean owners do not affect budgets and coverage at these stations. As newspaper research has demonstrated, the impact of ownership is related to the goals of the company that owns the station.

The results for the competition hypotheses were not consistent with research about newspaper and local television news competition, but competition was related to three of eight

dependent variables. Competition resulted in more staff-prepared news, a higher percentage of time devoted to staff-prepared news, and a decrease in staff-prepared news devoted to local news.

As the theory of monopolistic competition would predict, radio news stations tend to differentiate themselves when they face competition within their niche. This differentiation takes the form of something other than an emphasis on local news, which is what happens with intercity newspaper competition. Two more regressions were run, and results showed that competition was associated with a higher percentage of staff-prepared national and international news but not with a higher percentage of staff-prepared state coverage ($p < .05$).

This increase in national/international coverage probably represents the nature of radio news, which is a "package" of information that may be recycled on a regular basis. A station might repeat a 30-minute package twice in 60 minutes. The ability to attract audience from competitors may reflect the completeness (e.g. a local, state, national, international mix) of any discrete package rather than an overall emphasis on a particular geographic area. Thus, the increase in national and international news may reflect the effort to provide a more appealing mix of news than the competition.

This recycling in radio news means a small staff can increase the percentage of staff-prepared news without needing more reporters. For example, a 30-minute radio news report with 15 minutes of staff-prepared news can increase staff-prepared news 33% by adding only five more minutes of news. Five more minutes of news will not overburden a staff, particularly if the news is

recycled.

The proportion of time given local news was not related to competition, as predicted, but to the interaction of market size and proportion of all time given news. Large markets with 100% news formats had a higher percentage of local news, while smaller markets with less than 100% news tended to have a smaller percentage of local news. Of course, even smaller markets represent markets with large numbers of people (the mean population of these markets was 1.46 million, while the median was 671,650).

The difference in local news emphasis that comes from the interaction of market size and proportion of all time devoted to news runs counter to what happens with large-market newspapers and local television newscasts, which have a smaller percentage of local news than do small-market newspapers and newscasts.[53] These opposite trends hold promise for exploring competition among various media for listeners and readers of news.

In summary, the absence of a relationship between competition and financial commitment in radio news probably results from the different market structure of all-news radio stations compared to newspapers and local television news departments and to the different nature of radio news (i.e. the "recyclable package").

First, as the number of firms increases in a market, the excess profit above what is called normal profits will decline.[54] In other words, increasing the number of firms will tend to reduce the portion of total profits that is available to a particular firm in a market. As a rule, the total profit available to a firm in a monopolistic competitive market will be

considerably less than that available in an oligopoly market. The implication is that the financial commitment from competition in oligopoly markets is a function of amount of profit a firm has as well as intensity of competition. The larger the number of competitors, whether in a particular niche or in the entire market, the less likely a firm is to have excess profits to invest in differentiating the media product.

The second factor is the nature of radio news. Just as radio packaging affects content, it also affects financial commitment. Listeners of radio news tend to listen selectively, while in a car for example. This selective listening means radio news does not have to produce completely new newscasts every hour. Instead, radio news prepares shorter packages of news that attract listeners with a mix of news from around the world. These packages can be updates throughout the day with changes in a few stories. Such packaging does not require as large a staff or as great an expenditure of resources as one would find at newspapers and local television news departments.

These explanations of the differences between the impact of radio competition and competition among other media are speculative. However, the speculation is consistent with economic theory.

A limitation of this study is its use of a dummy variable for competition. Dummy variables tend to underestimate the impact of the same variable measured with interval-level data.[55] Other studies could use market share as a way of better understanding the impact of competition.

In addition, a content analysis of the radio news might

explain what type of impact the increased staff production in competitive markets has on the quality of the news mix. It would also verify the validity of the survey estimates of content distributions.

ENDNOTES

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3. See: Galen Rarick and Barrie Hartman, "The Effects of Competition on One Daily Newspaper's Content," Journalism Quarterly, 43:459-463 (Autumn 1966); David J. Stakun, "Content Analysis of the Bloomington Herald-Telephone During and After Publication of the Competing Courier-Tribune." Unpublished master's thesis, Indiana University, 1980; Katherine Trim, Gary Pizante, and James Yaraskavitch, "The Effects of Monopoly on the News: A Before and After Study of Two Canadian One Newspaper Towns," Canadian Journal of Communication, 9:3:33-56 (1983).

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Quarterly, 64:281-290 (Summer-Autumn 1987).

5. Litman and Bridges, Ibid.

6. Allen H. White and Julie L. Andsager, "Winning Newspaper Pulitzer Prizes: The (Possible) Advantage of Being a Competitive Newspaper," Journalism Quarterly, 67:912-919 (Winter 1990). The premise is simple: prize-winning stories use more non-governmental sources.

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9. George Sylvie, "A Study of Civil Disorder:The Effect of News Values and Competition on Coverage by Two Competing Daily Newspapers," Newspaper Research Journal, Winter 1991, pp. 98-113.

10. Stephen Lacy, "Newspaper Competition and Number of Press Services Carried: A Replication," Journalism Quarterly, 67:79-82 (Spring 1990).

11. Doris L. Candussi and James. P. Winter. "Monopoly and Content in Winnipeg," in Robert G. Picard, James P. Winter, Maxwell E. McCombs, and Stephen Lacy, eds. Press Concentration and Monopoly (Norwood, NJ: Ablex, 1988), pp. 139-145.

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27. Guido H. Stempel III, "Effects on Performance of a Cross-Media Monopoly," Journalism Monograph, No. 29, June 1973.

28. Lacy, 1992, op. cit.

29. For a discussion of media economics see Robert G. Picard, Media Economics: Concepts and Issues (Newbury Park, CA: Sage, 1989).

30. Barry R. Litman, "Microeconomics Foundations," in Robert G. Picard, James P. Winter, Maxwell E. McCombs, and Stephen Lacy, eds. Press Concentration and Monopoly. (Norwood, NJ: Ablex, 1988), pp. 3-34.

31. A circulation spiral occurs when one of two competing newspapers in a city gets a significant advantage over the other in circulation. This circulation advantage leads to an advertising advantage, which leads to an increase in the circulation advantage because people read newspapers for advertising as well as for news. The result of the spiral is that one newspaper will continue to gain in circulation and advertising as the other falls further behind. See Litman, op. cit.

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34. Angela Powers, "The Changing Market Structure of Local Television News," Journal of Media Economics, Spring 1990, pp. 37-55.

35. Riffe and Shaw, op. cit.

36. See Riffe and Shaw, Ibid.

37. Broadcasting Yearbook 1986 (Washington, D.C.: Broadcasting Publications Inc., 1986).

38. Twenty stations actually programmed no news; six were outside the continental United States; and one had not started operation.

39. Riffe and Shaw, op. cit.

40. Three sources were compared: James H. Duncan Jr., American Radio: Summer 1986 Supplement (Kalamazoo, MI: Duncan's American Radio, Inc., 1986); James H. Duncan Jr., American Radio: Small market Edition 1987 (Kalamazoo MI: Duncan's American Radio, Inc., 1987); and Broadcasting Yearbook 1986, op. cit.

41. Busterna, 1980 and 1988, op. cit.

42. Lacy, 1987, and Lacy, Atwater and Qin, 1989, op. cit.

43. See Busterna, 1980 and 1988, op. cit; Lacy, 1987, op. cit.; and Lacy, Atwater and Qin, op. cit.

44. The reported number of hours per week of news and information was divided by the reported total number of hours per week on air.

45. Barbara G. Tabachnick and Linda S. Fidell, Using Multivariate Statistics (New York: Harper & Row, 1983).

46. See Jacob Cohen and Patricia Cohen, Applied Multiple Regression Analysis for the Behavioral Sciences (Hillsdale, NJ: Lawrence Erlbaum Associates, 1975), pp. 67-70 for a discussion of these problems.

47. All variables had skewness values between plus or minus one, except proportion of all time devoted to news (-1.13),

fulltime staff (1.45), number of reporters (1.81), and market size (2.00). Regression is fairly robust with respect to moderate violations of skewness. See Michael S. Lewis-Beck, Applied Regression: An Introduction (Beverly Hills, CA: Sage, 1980), pp. 29-30 for a discussion of robustness. However, as a check, these four variables were transformed and new regressions were run. All variables, except proportion of all time devoted to news, were transformed using the square root. Proportion of all time devoted to news was reflexed and then the square root transformation was used because the variable was negatively skewed. See Tabachnick and Fidell, op. cit., p. 84-85.

After the transformation, the R^2 figures for all regression were equal or below those in the original equations, except hours per week of news and percentage of time devoted to local news. As discussed below, equations using interactive variables were also run. The R^2 for hours of news was equal for square root transformations and interaction effects. The R^2 of the proportion of time devoted to local news was greater for the interaction equations than for the square root transformation equation. This indicates that the non-linear relationship between the independent variables and proportion of time about local news was a result of interaction.

The other five equation using square root transformations showed that the conclusions of this study were not affected by data skewness.

48. Natural logarithmic transformations are a way of transposing non-linear relationships into linear relationships. If the original relationship was non-linear, the R^2 for the log

regression equation will be greater than that of the original equation. See Tabachnick and Fidell, Ibid.

49. Interaction among variables occurs when the relationship among independent variables is multiplicative rather than additive. To test interaction, the original variables can be multiplied to form new variables. See Hubert M. Blalock, Jr., Social Statistics, revised 2nd. ed. (New York: McGraw-Hill, 1979), pp. 489-493; and Beck, op. cit., pp. 54-56.

No interaction effects were found among group ownership and other variables. However, interactions among competition, proportion of time devoted to news, and market size were related to hours of news per week and proportion of time devoted to local news. The interaction variables used here were: competition X market size; competition X proportion of time devoted to news; market size X proportion of time devoted to news; and competition X market size X proportion of time devoted to news.

50. Tabachnick and Fidell, op. cit.

51. Unique variance in an dependent variable associated with that in an independent variable was determined by squaring the part correlation. The squared part correlation is the amount of variance in the dependent variable added by including the independent variables to an equation already containing the other independent variables. See Jae-On Kim and Frank J. Kohout, "Multiple Regression Analysis: Subprogram Regression," in SPSS: statistical Package for the Social Sciences, 2nd. ed. (New York: McGraw-Hill, 1975), pp. 332-334.

52. Because interaction variables are created by multiplying variable, the interaction variables can be highly correlated with

the original variables and with other interaction variables. In this study, all of the interaction variables had correlations of .97 or greater. They also were highly correlated with competition and market size.

To solve this problem, equations were run separately for each interaction variable. Control variables from the original regression equations were used when no multicollinearity was present.

53. Stephen Lacy and James M. Bernstein, "Daily Newspaper Content's Relationship to Publication Cycle and Circulation Size," Newspaper Research Journal, Spring 1988, pp. 49-57; and James M. Bernstein, Stephen Lacy, Catherine Cassara, and Tuen-yu Lau, "Geographic Coverage of Local Television News," Journalism Quarterly, 67:663-671 (Winter 1990).

54. Normal profits are those required for an owner to continue keeping her money in a business. See Picard, 1989, op cit.

55. Serena W. Stanford, "Statistical Design in Survey Research," in Guido H. Stempel and Bruce H. Westley, Research Methods in Mass Communication, 2nd. ed. (Englewood Cliffs: NJ: Prentice Hall, 1989), pp. 173-199.

Table 1

Regression Analysis for the Impact of Competition and Ownership on Financial Commitment and Content of Radio News

	Independent Variables (Beta Weights)					
	Percent of time devoted to news	Population in county	Presence of another news station	Group Owned	R^2	N
Dependent Variables						
Financial Variables						
Fulltime staff	.154	.690[c]	.045	.001	.55[c]	68
Number of reporters	.190	.616[c]	-.043	.019	.39[c]	57
Total network feeds	.070	-.234	-.016	.011	.00	68
Hours of News	NA	.154	.236	.073	.11[b]	68
Houre of staff prepared news	.277[b]	.286[b]	.411[c]	.100	.56[c]	67
Content Variables						
Percent of staff news that's local	-.062	.273	-.548[c]	-.205	.18[b]	64
Percent of time for staff reports	.015	.252	.287[a]	.145	.27[c]	67
Percent of all time that's local	-.042	.485[b]	-.088	.032	.14[b]	64

[a] Statistically significant at the $p < .05$ level.
[b] Statistically significant at the $p < .01$ level.
[c] Statistically significant at the $p < .001$ level.

THE FRAMING OF AN ISSUE:

A CASE STUDY OF GAY AND LESBIAN NEWS COVERAGE

by Howard Voland

This paper has been prepared for presentation at the
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INTRODUCTION

> Homosexuality is incompatible with military service. The presence in the military environment of persons who engage in homosexual conduct or who, by their statements, demonstrate a propensity to engage in homosexual conduct, seriously impairs the accomplishment of the military mission. The presence of such members adversely affects the ability of the Military Services to maintain discipline, good order and morale; to foster mutual trust and confidence among service members; to ensure the integrity of rank and command; to facilitate assignment and worldwide deployment of service members who frequently must live and work under close conditions affording minimal privacy; to recruit and retain members of the Military Services; to maintain the public acceptability of military service; and to prevent breaches of security.[1]

So reads current Department of Defense policy despite a long history of honorable service by gay men and lesbians,[2] and despite Pentagon-commissioned studies which conclude there is no valid support for such a policy other than societal prejudice.[3]

This policy has increasingly been challenged in the last two decades by gay rights activists and by gay and lesbian military personnel.[4] These challenges have, at times, generated considerable media coverage. How the media cover, or frame, an issue may influence public perceptions of, and reactions to, that issue, particularly when it concerns a group about which the public has little first-hand knowledge, such as gay men and lesbians.[5]

It is the purpose of this study to examine how the mainstream news media have framed the public debate of the suitability of gay men and lesbians for military service.

REVIEW OF LITERATURE

Of all the events and activities that take place each day, only a few can make the news. As a result, journalists have created a set of conventions which help define news, and determine

how it is selected and presented. Richard Ericson, Patricia Barnak and Janet Chan called these conventions "a vocabulary of precedents: what previous exemplars tell them should be done in the present instance."[6] Todd Gitlin also called attention to these journalists' routines. He wrote:

> These routines are structured in the ways journalists are socialized from childhood, and then trained, recruited, assigned, edited, rewarded, and promoted on the job; they decisively shape the way in which news is defined, events are considered newsworthy, and "objectivity" is secured.[7]

Objectivity has become central to any judgement of performance of the news media and its reporters and editors by both professionals and the public.[8] Mitchell Stephens defined objectivity as a term journalists use "to express their commitment not only to impartiality but to reflecting the world as it is, without bias or distortion of any sort."[9] As Gitlin implied, journalists' routines are designed to secure, or at least attempt to secure, this Holy Grail of journalism.[10]

However, Herbert Gans wrote that this quest, too, is doomed to failure. Objectivity is not possible, he said, because in the end reporters cannot proceed without values.[11] Robert Karl Manoff and Michael Schudson wrote it is not possible for reporters to "simply and successfully mirror the real world."[12] Tom Koch put it this way: "By being involved in an event -- even as a recorder -- we influence it."[13]

Gaye Tuchman argued that the journalists' routines followed in the attempt to secure objectivity can be seen as a strategic ritual designed to protect journalists from criticism.[14] Tuchman

wrote a newspaper story is a collection of "facts," which are assessed and structured by the reporter. In addition to verifying the facts, the reporter follows four "strategic procedures" as part of this ritual of objectivity. These are the presentation of conflicting possibilities, the presentation of supporting evidence, the judicious use of direct quotations as a further form of supporting evidence, and the structuring of the information in a sequence that reflects its importance.[15]

Because it is not possible to report facts that are not mediated by bias and assumption,[16] and because objectivity can then be construed as a set of norms devised for journalists to follow, Allan Rachlin argued objectivity is a social construction. Journalists cannot stand apart from their culture, he said, they are immersed in it, and their work is shaped by it.[17]

Framing theorists offer some insight into the way the news media construct our view of the world. Tuchman presented the idea of news as a frame when she used the metaphor of a window framing our view of the world, with its size, number of panes, clarity, and view all influencing what we see.[18] Drawing upon work by Erving Goffman, Tuchman characterized frames as the organization of strips, which Goffman defined as arbitrary slices cut from ongoing activity.[19] Therefore, Tuchman maintained, how the news is framed, or organized, is actually the act of constructing reality. In other words, the way the news is framed provides one view of an event out of many possibilities. In the absence of knowledge of other possibilities, this one view becomes reality.

The act of making news, then, becomes the act of constructing reality rather than providing a true picture of reality.[20]

Mark Fishman examined reporters' beats and found this traditional journalists' routine defines the world in a specific way. A beat has a history, is assigned, and involves a domain outside the newsroom -- for example, the city hall beat.[21] The use of the beat, Fishman wrote, defines the world of possible news, which is progressively narrowed to provide a uniform view,[22] that deliberately "contains procedures for not knowing certain things."[23] For example, Fishman cited the case of a woman who complained of police harassment at a budget hearing. Because the reporters viewed the complaint as not applicable to a story on a budget hearing, they took no notes and the woman's complaint was not reported. It was a nonevent.[24] Such routine news coverage, Fishman wrote, "legitimates the existing political order by disseminating bureaucratic idealizations of the world and by filtering out troublesome perceptions of events."[25] In other words, how routine news is framed serves to legitimate the status quo and reinforce contemporary social arrangements.[26]

In his study of the news coverage of the Students for a Democratic Society, Todd Gitlin identified a number of framing devices used, which changed over time. The early devices included marginalization (demonstrators as unrepresentative or deviant), polarization (balancing the antiwar movement against ultra-right groups), trivialization (making light of various aspects of the movement), emphasis on internal dissension, and disparagement (of the movement's size and effectiveness). The later

devices included reliance on statements from official government sources, attention to right-wing opposition, emphasis on violence (in the demonstrations) and on communist connections, and the use of deligitimizing quotation marks (e.g., "peace march").

"Some of this framing," Gitlin wrote, "can be attributed to traditional assumptions in news treatment: news concerns the event, not the underlying conditions; the person, not the group; conflict, not consensus; the fact that advances the story, not the one that explains it." But other aspects influence the framing as well, Gitlin added, to include the use of beats and their reliance upon official sources, and the tendency of reporters and editors to reproduce the dominant ideological assumptions prevailing in society.[27]

The heavy reliance on official sources by reporters and editors was documented in a 1973 study by Leon Sigal,[28] and was reconfirmed 10 years later by Jane Delano Brown, Carl R. Bybee, Stanley T. Wearden and Dulcie Murdock Straughan. They commented that such dependence upon governmental and elite sources limits "the diversity of information available to the public."[29] Lance Bennett was also critical arguing reliance upon official and elite sources results in mass media that simply pass on a "daily garble" of confusing images.[30] Allan Rachlin's study of two international news stories led him to conclude this reliance on official pronouncements and interpretations has resulted in an "American, capitalist filter" which colors journalism, and which presents a world "shaped more by images and understanding origi-

nating in an American social/political/economic ecology than by the events themselves."[31]

Bennett, in his discussion of how the media frame the news, continues this theme:

> The news gives people a me-first view of the world, in which my well-being, my group and my country are emphasized over social realities that differ from one's own. Even the two-sided format used in most reporting usually offers one side that is much closer to home than the other.[32]

Like Tuchman, Bennett is concerned people too easily assume news stories are a true picture of reality rather than one of many possible constructions of that reality, and that they respond to that construction. He wrote:

> Even, and perhaps especially, those images with the most dubious links to reality can generate actions in the real world, actions that have real effects: the election of corrupt leaders, the acceptances of oppressive laws or ideas, the labeling of social groups, support for wars, or tolerance of chronic social and economic problems.[33]

Framing theorists make a strong case that how news is framed -- what is asked and not asked, what is included and what is excluded, who is asked and who is not, what is assumed and not assumed -- serves to construct or define a version of reality for the audience, rather than a true picture of reality. Since these constructions are subject to varying influences, and can be changed, it is important not only to acknowledge their presence, but to study how they are constructed, and what they are.

But such research examining the framing devices used by the mass media in reporting on the gay and lesbian minority is relatively sparse and primarily theoretical in nature.

Gary Atkins and William Rivers identified gay men and lesbians as one of the minority groups being discriminated against by the media. Such discrimination, they wrote, takes the form of neglect, or distortion through stereotyping.[34] Larry Gross argued that one of the conventions of objectivity, presenting both sides of an issue, is fatally flawed because the definition of the extremes will determine where the center will appear to be. Gross observed the apparent center in the coverage of the gay and lesbian minority is a lot further to the right than to the left, "which puts the 'objectively balanced' mainstream clearly to the right of center."[35] Thomas Waugh explained it this way:

> How many times, for example, has the media blackout been lifted briefly only to have us [gay men and lesbians] debate our right to live and love with, at best, apologists for discrimination, and, at worst, proponents of concentration camps and even capital punishment?[36]

Gross argued that groups at the bottom of various power heirarchies, for example gay men and lesbians, will be kept in their place through relative invisibility. When such groups do attain visibility, the manner of that representation will reflect the biases of those who define the public agenda. These elites, Gross wrote, are ". . . (mostly) white, (mostly) middle-aged, (mostly) male, (mostly) middle and upper-middle class, and entirely heterosexual (at least in public)." In addition, the mass media will be most effective in cultivating the images of groups of which the public has little first-hand knowledge.[37] Gross continued:

> The mass media play a major role in this process of social definition, and rarely a positive one. In the absence of ade-

quate information in their non-mediated environment, most people, gay or straight, may have little choice other than to accept the narrow and negative stereotypes they encounter as being representative of gay people.[38]

This process is amplified, as Francis FitzGerald wrote, because: ". . . gay people [have] no distinguishing marks, no permanent badges of color, class, or accent. . . . gay people, black or white, men or women, [are] invisible to others as long as they [want] to be . . ."[39] This relative invisibility, coupled with the fact that gay men and lesbians must acknowledge their homosexual orientation through a process of discovery and acceptance, creates a rare, if not unique, communication situation. First, the media often provide most of the information about homosexuality during this self-discovery process. A study by Sean O'Neil concluded: "Mass media were most often the means by which respondents could legitimize and learn about their experiences [gay], even though the mass media usually presented negative images."[40] Second, the mass media are the way most people get much of their information about the gay and lesbian minority, or as Gross wrote, "By definition, portrayals of minority groups and 'deviants' will be relatively distant from the real lives of a large majority of viewers."[41]

Gross continued, ". . . gay people are portrayed and used in news and dramatic media in ways which serve to reinforce rather than to challenge the prevailing negative images." This continued depiction of gay men and lesbians as abnormal while suppressing images that are positive, or even simply unexceptional, serves to maintain the idea that gays are a threat to the moral

order.[42] In other words, the media's depiction of gay men and lesbians serves to reinforce societal prejudice, institutionalizing it in a way not unlike the military's policy banning them from service.

Such institutionalized prejudice, it is argued, serves to keep the gay and lesbian minority somewhere on the fringe, or marginal edge, of society. Its members are often denied full participation in society's economic, political and social structures.[43] It would appear, then, that Gross would argue by reinforcing societal prejudice against gay men and lesbians, the media contribute to maintaining the continued marginalization of the gay and lesbian minority.

James Chesebro wrote, ". . . the issue of homosexuality is predominantly a communication problem, and that a humane understanding and resolution of this issue is to be found in established frameworks, methods, principles, and perspectives of the discipline of communication."[44]

In summary, it is argued the news media are active participants in the construction of the way society views the gay and lesbian minority. Underlying assumptions about the nature of news and the use of journalists' routines influence the framing devices used by the news media. These reflect contemporary social standards and legitimize the status quo, a status quo which marginalizes the gay and lesbian minority.

The purpose of this study is to examine these concepts in light of the current, mainstream news coverage of a particular issue about, and of concern to, the gay and lesbian minority: the

suitability of gay men and lesbians for U.S. military service. How is this issue being framed by the mainstream news media? How do underlying assumptions about the nature of news, and the use of traditional journalists' routines influence that framing? Does the framing reflect contemporary social standards? Does it legitimize a status quo which marginalizes the gay and lesbian minority?

METHODS

The approach chosen to answer these questions is historical and qualitative, an approach which Gitlin characterized as "the qualitative, exhaustive approach to news history."[45] It is a method that lends itself to the search for the often-subtle framing devices and the assumptions and journalists' routines that influence their use.

Because this study sought to examine the most recent framing devices used by the news media, the time period selected needed to be relatively current. The release by members of Congress of two Pentagon-sponsored studies on this issue by the Defense Personnel Security Research and Education Center (PERSEREC) in September 1989 offered a relatively clear starting point because it appears to be the beginning of a new round of public debate on this issue. For example, there are only six applicable entries in the New York Times Index for 1989, half of which came after the release of the studies. In 1990, there are 16 such entries.

The end point was less easy to define. April 15, 1991, was chosen for several reasons. At the time the news articles were being selected, that was the latest date available for those in-

dexes being consulted. This was also the time immediately following the Persian Gulf War, and in the spate of patriotic military coverage that followed, public debate of this issue largely disappeared. Furthermore, it was determined there were a sufficient number and variety of news articles during the period selected to form an adequate basis for this study.

However, the news media were monitored through August 1991. At the beginning of that month, The Advocate, a national gay news magazine, outed as gay an assistant secretary of defense. But other than a major story in Time magazine, no other important articles resulted.[46] The Time article was added to this study because it was an important article and no other Time article was found during the study period. This, along with a single article each from U.S. News and Newsweek, provides this study with an article from each of the major U.S. news magazines. No suitable article was found in the Economist, and a review of the Readers Guide to Periodical Literature revealed no other applicable listings for the mainstream news magazines.

Because it is beyond the resources of this study to examine all the news media in the United States, it was decided to study the mainstream print media with a focus on what could be called the "prestige" press -- the three major news magazines, the New York Times, the Washington Post and the Los Angeles Times. The indexes for these newspapers were examined. In addition, two electronic indexes were consulted to provide articles from other daily newspapers in the United States, the National Newspaper Index and the Newsbank Electronic Information System. Of all the

articles of interest, all but two were found. The articles found were read, and those longer than a few paragraphs were photocopied for further study. (They are listed in Appendix 1.)

This study looked for characteristic framing devices common to much of the mainstream coverage of this issue, and it looked for the common journalists' routines and assumption about news which influenced the use of these framing devices. Not every device will appear in every article, nor will a single appearance in an article indicate a framing device common in the coverage.

ANALYSIS

The underlying assumptions about the nature of conventional news have been examined extensively by other researchers. The purpose of this discussion is to show how they influence the framing devices used in the news coverage of this issue. Gitlin identified several of these assumptions, which could be called characteristics of traditional news.[47] These are readily apparent in the coverage of this issue.

The first is that news focuses on events, not on the underlying conditions. Most of the coverage in this study deals with events either involving the military justice system -- courts-martial, investigations, discharges, court appeals, court decisions -- or with actions being considered, or taken, by universities to ban or curtail the Reserve Officer Training Corps (ROTC) program and military recruitment efforts on their campuses solely because of the military's ban on gay men and lesbians.

A New York Times article by Elaine Sciolino offered the greatest opportunity for a detailed examination of the issue, but

instead, it provides the best demonstration of this emphasis on events over explanation and analysis. The article addresses the release of the PERSEREC studies, but instead of focusing on what the studies say -- essentially a detailed analysis of the issue -- it focuses on the event of their release and the Pentagon's rejection of the studies. This excellent opportunity to examine the issue's underlying conditions was ignored in favor of a primary focus on the studies' rejection, an event.[48]

The events that received this news attention are the type that would fall within the range of reporters' traditional beats as suggested by Fishman,[49] the Pentagon and the military, the court system, and the colleges and universities.

The second characteristics is that news concerns conflict rather than consensus. This is closely related to the emphasis on events because so many events concern conflict. The New York Times article on the PERSEREC studies just discussed is an excellent example. Instead of focusing on the content of the PERSEREC studies, the article focuses on the conflict between the Pentagon and its agency, PERSEREC. Additional conflicts mentioned were those between the Department of Defense (DOD) and some members of Congress, and between DOD and gay men and lesbians.

Indeed, the entire issue is presented consistently as one of conflict, primarily between the gay and lesbian minority and DOD. This conflict is formalized through coverage of the court cases, the military investigations, and the discharges of gay and lesbian service members. The other major conflict emphasized is between the colleges and universities opposed to the ban and DOD.

A third characteristic is that news concerns the individual, not the group. This desire to personalize the issue is seen throughout. Newsweek[50] and Time[51] both led with individual cases, and discussed more of them throughout their articles. U.S. News,[52] while it did not lead with one, still discussed several. Since the coverage in the newspapers is often about investigations and court challenges, these are also concerned with the individual. Jane Gross's long New York Times article covers the entire issue through the use of personalized experiences.[53] The longest article in the study, which is in the Washington Post Magazine, is a biography of Joseph Steffan, a midshipman forced to leave the U.S. Naval Academy shortly before he was to graduate because he said he was gay.[54]

The last characteristic identified by Gitlin is that news concerns the fact that advances the story, not the one that explains it. The best example is in those articles on the PERSEREC studies because the studies themselves provide so much information that could be used to explain the issue. As already discussed in the Sciolino article, that story focuses on an event, the rejection of the studies by the Pentagon, and on the conflict between the Pentagon and PERSEREC. This serves to divert attention from the information contained in the studies. The article was written to advance the story of rejection and conflict, not to explain why and how it came about. A similar analysis could be made for the PERSEREC articles that appeared in the Washington Post[55] and the Los Angeles Times.[56]

Perhaps the most pervasive example of this characteristic, which appears in some way in many of the articles, is exemplified by this Newsweek quote: ". . . gay soldiers and sailors are seen as a threat to morale and discipline." The next statement has nothing to do with this one, and nowhere is it explained why or how they are a threat to morale and discipline. The reader is left to draw his or her own conclusions. The assertion is made; it is not explained, and the narrative continues.

In addition to the characteristics outlined by Gitlin, the journalistic conventions used in the quest for objectivity, which also have been studied extensively by other researchers, influence how an issue is framed by the news media. Tuchman identified four procedures used in the attempt to be objective.[57] These, not surprisingly, are also closely tied to use of sources -- how they are selected and how they are presented.

These procedures call for the presentation of conflicting possibilities, the presentation of supporting evidence, the use of direct quotes, and the structuring of news to reflect importance. The first has already been implied in the discussion of news focusing on conflict. The news articles examined consistently present two conflicting possibilities, one the rescission of the Pentagon policy banning gays and lesbians, the other maintaining the status quo. But, as with most issues, there is room for other viewpoints. However, only one article found, and that in an opinion column in the magazine USA Today, advocates another point of view: maintain the policy but enforce it with less zeal.[58]

In presenting these conflicting possibilities, reporters consistently turned to the Pentagon for information for defending the status quo. Here they were frustrated because DOD refused to comment other than to reiterate the policy statement. The only exception was a short statement released commenting on the first PERSEREC study, which said: "The report was merely a draft recommendation, which was not accepted by the Department of Defense because it was not responsive to the original research request. We cannot comment on matters that remain unresolved before the court."[59] This brief comment resulted in the study being referred to as a draft in many of the news articles, a label clearly designed to reduce the credibility of the study without getting into a debate about its validity. The stonewalling by the Pentagon forced reporters to use a number of tactics to present this side of the issue because to ignore it would be a clear violation of the norms of objective reporting.

The most common tactic, indeed the one used in most of the articles, was to quote either directly or indirectly from the Pentagon policy statement quoted in full at the beginning of this study. For example, the Gross article in the New York Times comments that the Pentagon "says that accepting homosexuals would hamper recruiting and make it harder to maintain discipline and morale." This is clearly taken from the policy statement. Nowhere does an official military source explain how gays and lesbians hamper recruiting or cause discipline and morale problems. A close reading of the policy statement reveals that it essentially states the ban is justified simply because society is

prejudiced against gays and lesbians.[60] By refusing to comment, the Pentagon avoided discussing this justification of societal prejudice and, at the same time, put itself above the dispute. It assumed the news media's need to present both sides of the issue would work in its favor, an assumption generally born out.

This assumption was justified in two ways. First, for example, the Gross article invoked all or part of the policy statement without challenge, that is without the reporter doing something to directly question the policy statement's assertions. The conventions of objectivity usually leave such challenges to sources advocating the conflicting side. This served to legitimate the policy statement; an agency of the U.S. government said it is so, so it must have a good reason for saying so.

Second, some reporters used unidentified sources to bolster the Pentagon's case. One of the best examples, which uses all four of Tuchman's procedures, is found in U.S. News. After quoting directly from the policy in the lead paragraph, the reporter later used unnamed "sources in and out of the military" to present supporting evidence for the policy. These were that "closet gays are a security risk because they are susceptible to blackmail over their secret sexual preference," that gay men are "'sissies' unsuitable for combat," worry about AIDS, worry that "politically active gays could become a threat to military order," and that in the "close quarters of military life, many heterosexual men would not tolerate well the stress of being near homosexuals." To further support these reasons, U.S. News immediately raised the case of Clayton Hartwig, the U.S. Iowa sailor

who was killed in a gun turret explosion along with 46 others. Despite admitting the Navy had withdrawn the "leaked evidence" that alleged Hartwig may have caused the explosion and despite acknowledging the strong denials from the family, U.S. News still repeated the unsupported allegation that Hartwig caused the explosion because he was "maladjusted and gay." Then U.S. News described Mirian Ben-Shalom, a lesbian drill sergeant fighting the army's attempt to discharge her, as an "activist in gay protests," a direct reference to the reason previously given about the worry of "politically active gays" becoming a "threat to military order." Finally, the dominant photograph shows Steffan holding an open umbrella over his head, a pose stereotypically "sissy," particularly in a military context.

Another example is a second New York Times article by Jane Gross.[61] Here the DOD policy and a message from Vice Admiral Joseph Donnell to his subordinates are quoted extensively. The Admiral wanted lesbians "vigorously rooted out of the service" because they are "more aggressive than their male counterparts," are "intimidating," and create a "predator-type environment" where they can sexually prey upon "young, often vulnerable" female colleagues.

Tuchman refers to this type of reporting as constituting a "web of facticity." When attempting to flesh out one supposed fact (e.g., gays as a threat to morale), the reporter "amasses a host of supposed facts that, when taken together, present themselves as both individually and collectively self-validating." To paraphrase Tuchman's example, the facts establish how one can

talk about gays as a threat to morale merely by talking about gays as a threat to morale.[62] Efforts such as this clearly worked to the benefit of the Pentagon. Both examples effectively raised a host of negative stereotypes without the Pentagon having to justify them.

In addressing the other side, reporters received more cooperation. Those involved in challenging the Pentagon policy were quoted frequently and by name. Only in a few cases, and those involved gays and lesbians still in the service, were sources quoted anonymously. In the articles concerning the ROTC debate, the sources were generally leaders of each side, usually professors. For the rest of the coverage, most of the sources were current or former gay or lesbian service members, their attorneys, or gay-rights activists -- sources, in Tuchman's words, with an "axe to grind."[63] In the rare instance when an official, non-gay source is quoted on this side (Congressmen Barney Frank and Gerry Studds are occasionally quoted, but it is almost always noted they are gay), it is deep within the article. For example, in both the New York Times and Los Angeles Times articles on the PERSEREC studies, although Congresswoman Patricia Schroeder was instrumental in their release, she is quoted only near the end of the articles, a location which indicates relatively little importance.

Because our discussions of objectivity have clearly shown it is not possible to report without some bias and distortion, its nature becomes central to the question of how an issue is framed. An examination of the articles in this study has found a number

of framing devices common in the news media when they are reporting on the question of the suitability of gay men and lesbians for military service in the United States.

Gay Men and Lesbians as Different. The most consistent framing device used is the one of gay men and lesbians as different. All the other framing devices discussed below are essentially elements of this one. This is certainly an obvious device; so obvious, in fact, without it there would not be an issue to debate. The DOD policy of excluding homosexuals is based entirely on a single difference: gay men and lesbians are sexually attracted to members of their own sex. This large population, defined by this single attribute, is culturally, economically, emotionally, politically and demographically as diverse as any group can be. Yet discussions of the issue cannot escape the underlying narrow stereotypes associated with the terms, gay, lesbian, and homosexual. It is these ill-defined, often homophobic, stereotypes that are the basis for this framing device, which emphasizes gay men and lesbians as different.

For example, the subhead of the Time article asks, "Should gays be allowed to serve in America's armed forces?" The use of "should" implies there may be reasons to change the policy, but at the same time it subtly reinforces the idea that gays and lesbians are different. It says there need to be good reasons to let them serve. When coupled with "allow," this implies a privilege to be granted. Taken together, there is a subtle connotation that serves to emphasize the idea of difference. Contrast that subhead to this rewrite: "Why shouldn't gays serve in Amer-

ica's armed forces?" This minimizes the difference by changing the emphasis to one of defense, and dropping any inference of privilege. In other words, there need to be good reasons for banning gays and lesbians from the military services.

Newsweek uses this statement: ". . . gay rights activists are hoping to show that homosexuality and national security are not mutually exclusive." The use of "hoping to show" sends a clear message that unless gays can prove to the nation otherwise, homosexuality and national security are mutually exclusive. The clear assumption is not only are gays and lesbians different, they are so different they probably cannot be trusted.

U.S. News uses a quote from one of the PERSEREC studies to send a similar message, "One [study] . . . suggests that the Pentagon set up a research project to see whether homosexuals would 'create insurmountable problems' in the military." What is particularly interesting here is that the journalist went to considerable trouble to find the quote, and then to paraphrase it in such a way as to significantly distort the meaning. The quote is buried within the body of the report, yet a brief summary of the report is conveniently provided at the beginning. Here, under conclusions and recommendations, it is stated, "We conclude that the time is ripe for engaging in empirical research to test the hypothesis that men and women of atypical sexual orientation can function appropriately in military units."[64] Nothing is written here about "insurmountable problems." The quote cited in U.S. News is buried on page 33 of the report in the middle of the Sum-

mary and Implications section. The relevant paragraph is quoted in full:

> For the purpose of military organization, however, quality of job performance may be less important than the effects of homosexuals (minority group members) on that important but ephemeral quality: group cohesion. The important question to be raised in future research must center on the claims that persons with nonconforming sexual attitudes create insurmountable problems in the maintenance of discipline, group cohesion, morale, organizational pride, and integrity.[65]

This paragraph is not about gays and lesbians creating "insurmountable problems" at all, but about "claims" that the reaction of heterosexual service members to gay and lesbian service members may "create insurmountable problems." Through the use of the paraphrase, the reporter completely changed the meaning and implication of the quote from one which addressed the problem of prejudice against gays and lesbians, to one which stressed their difference by implying the "insurmountable problems" were within their very nature.

A still more obvious example is found at the conclusion of the first paragraph of the U.S. News story. "They [homosexuals] may be grilled, run through hearings without rules of evidence, court-martialed, even sent to prison for homosexual acts. Still others who are not gay have felt the consequences of unjust and unproven accusations." The use of "unjust and unproven" here in connection with those "who are not gay" implies such accusations against gay service members are justified, at least in the context that they are taken against someone who is actually gay rather than against an innocent heterosexual. Such usage serves

to emphasize differences. Such things happen, or at least should happen, to someone other than us.

In a final example, the Colorado Springs Gazette Telegraph, in reporting on an investigation on homosexuality at Fort Carson, said, "they also netted three enlisted men and Army Capt. Robin Kerr."[66] The use of "netted" here means to capture or ensnare, something that is done to fish, animals or criminals, to something or someone different from ourselves.

Gays and Lesbians as Victims. One of the most used framing devices is that of portraying gays and lesbians as victims. This follows naturally from the types of events that have triggered the news coverage: bans, investigations, court actions and discharges. These, coupled with the media's desire to personalize coverage, make it almost impossible to avoid the use of this framing device. For the journalists, those gays and lesbians who attract media attention are almost irresistible as victims, victims of a monolithic, impersonal bureaucracy enforcing an at best, questionable policy, or victims of their own homosexuality.

The Steffan case is an excellent example. It appears often, and Steffan is always portrayed as a bright, talented, highly respected midshipman who is kicked out of the U.S. Naval Academy solely because he admitted he was gay. Several of the articles point out he twice sang the national anthem at the Army-Navy game. All this has nothing to do with the issue, but everything to do with creating sympathy for him as either a victim of the system or as a victim of his own homosexuality. The obviously sympathetic tone of the Washington Post Magazine article clearly

makes Steffan a victim of the system. For example, it says: "Should he win [the court challenge to the policy], Steffan could open the door to other qualified gays who would like to make the military their career too." The use of "qualified gays" clearly implies that being gay in itself should not be disqualifying. U.S. News, however, makes him a victim of his own homosexuality. It focuses on the event of the dismissal of Steffan's court case because he refused to "answer court questions about whether he had engaged in homosexual conduct." The focus on Steffan's non-cooperation with the courts and the use of an ill-defined euphemism for sexual activity that allows for imaginative interpretation detracts from the framing device of Steffan as a victim of the system. Rather, the framing is that of a young man who had everything but lost it because of his homosexuality.

Jane Gross's long article in the New York Times, an article by Nora Zamichow in the Los Angeles Times,[67] and one by Marc Kaufman in the Philadelphia Inquirer[68] are all framed very much as gays and lesbians as victims. The Gross article is headlined "For Gay Soldiers and Sailors, Lives of Secrecy and Despair." The lead paragraph says "gay men and lesbians in the Armed Forces lead desperate, furtive lives." The third paragraph leads with a direct quote, "This is not a life you'd choose for your worst enemy." This framing dominates throughout.

Both the Zamichow and Kaufman articles focus on the separation of gay and lesbian couples brought about by the Gulf War. Kaufman's lead states, "Thousands of Americans serving today in the Persian Gulf have to hide the photos of loved ones they carry

into battle." Zamichow opens her story with, "When James Darby, 23, writes to his lover aboard a battleship in the Persian Gulf, he signs his name with only his first initial." This need for secrecy and this fear of discovery create the gays as victims dominant frame of these articles. But this is also a good example of the gays as different frame, what Gross referred to as "their outcast status."

Time described the enforcement of the ban as the "barring of qualified" people because "they are not wanted." While to not be needed by the military might strike some as an advantage, to not be needed because of who you are stirs a dread in most of us, and from there it is an easy step to view those not wanted as victims. A final example is the statement in U.S. News that "many suffer" for their homosexuality.

While this framing device primarily emphasizes difference, it can carry a negative connotation of its own. A study by Bruce E. Drushel concluded the average person may perceive the term "victim" as carrying a relatively negative connotation even though in newswriting its usage seems almost sympathetic.[69] Simon Watney, in writing about AIDS, suggested the term "victim" indicates total passivity and an inability to do anything about the situation.[70]

Gays and Lesbians as Sexual Deviants. None of the coverage is blatant enough to use the term sexual deviant, yet a subtle, and sometimes not so subtle, preoccupation with gay and lesbian sexual activity is found throughout the coverage.

Much of it is through the widespread use of such terms as homosexual acts, homosexual conduct and homosexual activity. The Philadelphia Inquirer article uses the expression "engaging in homosexuality," while the Columbia, South Carolina State liked the expression "women having sex with other women" so well it used it in the lead for two different articles.[71] Such terms obviously refer to same-sex sexual activity, yet they are so vague as to allow the reader's imagination full play. Only the article in the Colorado Springs Gazette Telegraph got specific when it reported that an officer was found "guilty of breaking military law by having oral sex with a male lover." But the use of "a" instead of "his" implies a promiscuity that is such a popular stereotype of gay men. The Rocky Mountain News, however, reported that the officer and his lover had been together for four years, creating a different context.[72]

Newsweek was the only news magazine to avoid such terms, yet it still managed to use this framing device by quoting a 1942 Navy report warning about the integration of black sailors aboard ship where "one man sits beside another; their hammocks or bunks are close together." Such a quote in this context is loaded with sexual implications as ill-defined as the terms discussed above.

Time surfaced this framing device in another way by quoting people refuting it. Steffan is quoted as saying, "It's based on the assumption that all homosexuals are sex maniacs . . . ." A woman who works for a group that defends gay and lesbian service members is quoted saying, ". . . women in the military are thought to be either whores or dykes." The second Jane Gross ar-

ticle in the New York Times did the same thing when it quoted a gay rights attorney comparing the description in an Admiral's memo of lesbians as predators to "the myth that male homosexuals are child molesters." Despite the refutations, the quotes still serve to raise the framing device of gays and lesbians as sexual deviants.

This framing device is used in still another way, by differentiating those "who admit to homosexual activity" from those "who merely profess homosexual inclinations," to quote Time, or "homosexuality as a state of mind" to quote U.S. News. A four paragraph article in the New York Times[73] put it this way: "The inquiry did not prove any sexual misconduct, although Mr. Gotay acknowledges that he is homosexual." Clearly, the inference is that any homosexual sexual activity is "sexual misconduct." The Washington Post Magazine article on Steffan goes to considerable effort to point out that Steffan is "not promiscuous," that the investigation found "no information to indicate he ever had sex with others at the academy," and that "sex has never been a high priority in his life." The Pentagon policy makes no such distinction, yet these articles do. Such a differentiation implies a degree of purity to those who do not act on their homosexual inclinations. The corollary, of course, is that those who engage in "homosexual activity" are less pure, perhaps more deserving of the military ban. To anyone who has ever spent any time in the United States military, the idea that the military values sexual purity is laughable, at least in a heterosexual sense. It is pure hypocrisy to draw a distinction between homosexuals who are

sexually active and those who are not without making the same distinction for heterosexuals. The only reason for such a distinction is to emphasize the framing device of gays and lesbians as sexual deviants.

Gays and Lesbians as Immoral. Another framing device winds its way through most of this coverage -- the implication that gays and lesbians are immoral. This framing device does not focus on sexuality, but rather on the idea that simply being gay or lesbian has immoral connotations.

The Washington Post Magazine states that Steffan's discharge was based solely upon his own admission of "sexual preference -- there were no tawdry rumors, no embarrassing allegations, no evidence that he had tarnished his reputation or the navy's." This is similar to the discussion above; the implication is that those who do not engage in homosexual sexual activity are somehow purer than those who do. But there is more to it. Rumors and allegations do not depend upon acts. They can be tawdry and embarrassing even when completely false. Reputations can be tarnished without justification. It would seem the implication is that to simply be gay invites the tawdry, the embarrassing, and the tarnishing. To avoid it, requires a character of extreme purity such as the one projected for Steffan -- as is often mentioned, he sang the national anthem, not once, but twice at the Army-Navy game. This is almost like the invocation of a spell to keep him above the tawdry, embarrassing and tarnishing.

A less esoteric example is the long Gross article in the New York Times. This article weaves a variety of indicators which

suggest gays and lesbians are less than moral. In the lead, it refers to them as leading "desperate, furtive lives." It is mentioned several times in the article they regularly tell lies to hide their sexual orientation. One gay serviceman, it was reported, was "shopping for a wife," which was pointed out as fraudulent because of the extra spousal benefits that would be received. A lesbian officer is quoted as saying she let "guys violate" her, "use" her, to protect her secret. Another lesbian is quoted as saying while under investigation she "felt like a horrible, terrible person" who didn't "deserve to live." She attempted suicide.

Another example is the article in the Colorado Springs Gazette Telegraph. It quotes the prosecuting attorney as demanding a stiff sentence for a gay officer because of "the seriousness of his misconduct" which was a "disgrace to his uniform." His misconduct was to have sex with his lover of four years, and to dress in drag for an AIDS benefit, something the Army paid Sgt. Perry Watkins to do.[74]

The use of the AIDS issue also appears in this framing device. Newsweek and U.S. News both cite the Leonard Matlovich case as an example of an exemplary gay serviceman, but also mention he died of AIDS. The U.S. News article also cites AIDS as one of the reasons given for maintaining the Pentagon ban. Indeed, the constant reiteration of the Pentagon policy, which is most often quoted in the form of gays being a threat to morale and discipline as well as a security risk, constantly serves as a framing device whereby gays and lesbians are considered immoral.

Gay Rights as Liberal Cause. Lastly, the framing device of gay rights as a liberal cause is implicit throughout the coverage. In American politics, the terms liberal and conservative have become so mired in emotional and political connotations that they have become code words. It is a fact of American politics that the idea of gay rights is anathema to religious conservatives and therefore to much of the Republican party. A popular joke among gays and lesbians calls the term "gay Republican" an oxymoron. As a result, favoring gay rights is almost a liberal litmus test.

It is most obvious in the coverage of the ROTC debate. The most blatant example is a Los Angeles Times article[75] which uses this lead:

> No one 'ho ho'd' for Ho Chi Minh, flashed a peace sign or toked on a joint, but the faint echo of Vietnam rattled through the University of Wisconsin on Monday as an extraordinary campuswide faculty congress urged an end to military training programs at the 43,000 student institution.

It isn't until the end of the next paragraph, and after another Vietnam reference, that it is reported this vote was solely because of the military's ban on gays and lesbians. The article continues with references to "violent anti-war and anti-military dissent," and reminds readers that "radicals fire-bombed the campus ROTC headquarters," and "blew up a Pentagon-financed" research center killing a researcher, all during the Vietnam era. All this despite the quoted goal of the proponents that they are "not hoping to rid the campus of ROTC" but to pressure the Pentagon into changing its policy on gays and lesbians.

The other examples are tame by comparison, yet this Vietnam reference surfaces in much of the other newspaper coverage. It is found in both New York Times and Washington Post articles. Such references clearly identify gay rights with liberal causes, not to say radical. The Washington Post coverage of the University of Wisconsin debate terms the proposal adopted as the "most radical" of three proposals.[76] The entire ROTC debate carries this frame, though, because in the public's mind the colleges and universities are generally considered to be centers of liberal thought.

This framing device is less obvious in the rest of the coverage, although there are a few indicators. Newsweek notes the "conservative Supreme Court" is not likely to overturn the military ban. An article in the Dallas Morning News[77] quotes a Congressional aide as saying, "this is a Congress that can't even pass the Equal Rights Amendment," when asked about the possibility of Congress overturning the ban. It is also implicit in the many references to "discrimination," a word which has become another code word associated with liberal causes.

In summary, it is argued the characteristics of news and the conventions of objectivity have influenced the framing devices used by the mainstream print news media to present the public debate of the suitability of gay men and lesbians for service in the U.S. military. Furthermore, these framing devices construct a view of the gay and lesbian minority in the context of this issue, a view framed as a conflict between society in the form of the Department of Defense versus a politically liberal, immoral,

sexually deviant, victimized minority. Such a summation is justified in that the use of these adjectives is clearly supported by the framing devices found. Yet put this way, it is oversimplified, almost a caricature. What is seen in each of these devices is an emphasis on difference, a focus on characterizations that separate the gay and lesbian minority from the rest of society. They are "other than us."

Such a framing results in a large part because of the characteristics of news -- the underlying assumptions about its nature -- that influence how the news is presented. The emphasis on events and conflict exacerbate differences, so does the emphasis on facts that advance the story rather than explain it, and the focus on individuals makes it easy to portray them as victims. The journalistic ideal of objectivity with its requirement to present conflicting possibilities also emphasizes differences. This in turn requires sources to present the conflicting sides, and these sources can be used to present the "facts" that make up the framing devices.

In addition to the questions this study asks about the nature and influence of the framing of this issue, it also asks: Does the framing reflect contemporary social standards? Does it legitimize a status quo which marginalizes the gay and lesbian minority?

DISCUSSION

The previous section discussed the characteristics of news, the traditional journalistic procedures, and the framing devices that emphasize the picture of gays and lesbians as "other than

us." If this is indeed, to employ Gaye Tuchman's metaphor, a construction of reality rather than a true picture of reality, it should be possible to suggest other ways to frame this issue.

When Congresswoman Patricia Schroeder asked for an explanation of why DOD "killed" the first PERSEREC study, she said: "We were told the report's mandate was to look at the reliability of homosexuals for security reasons, not the suitability of homosexuals for military service. I found that a distinction without a difference."[78] Gay men and lesbians argue their sexual orientation is a "distinction without a difference," a distinction not unlike the example that left-handed people are distinct from right-handed people. One of the Pentagon's successful strategies in this public debate has been to maintain the media's focus on the issue as one of a difference, not as one of a distinction without a difference.

A three page article in the February 19, 1990, issue of The New Republic[79] frames this issue as one involving a distinction, not a difference. It avoids or minimizes the journalistic norms and the framing devices used in the mainstream coverage that focused on gay men and lesbians as "other than us."

The article opens with a specific case involving 18 alleged gay servicemen but uses no names. This avoids the media's traditional personalization and thereby minimizes the gays-and-lesbians-as-victims framing device even though it refers to the Carswell case as typical of the "military's sporadic persecution of gays." It further minimizes the victimization framing by focusing on gays and lesbians who have no trouble in the service,

and then quotes a gay-rights attorney as saying, "Ninety-nine percent [of gay men and lesbians] go through and do very well."

The article then establishes that the Pentagon policy essentially bans gays and lesbians for "what are in essence thought-crimes." Later it cites the DOD policy statement in full calling it "a jambalaya justification, which tosses every remotely palatable argument in the pot. Consumed in a hurry, it almost tastes OK, but later proves indigestible." Most of the rest of the article is taken up with a piece-by-piece analysis of the policy statement that becomes a devastating destruction of its rationale. The result is a framing of the issue as a prejudiced DOD versus a minority characterized by a single attribute, or distinction, that does not make a difference.

A second, companion article[80] to this one frames the issue in another way. It focuses on the ROTC debate using a different angle, cost. Normally when an ROTC cadet does not qualify for a commission, he or she must either serve in the enlisted ranks or pay back the military for the benefits (tuition, books, spending money etc.) received from it, unless the cadet is gay or lesbian. Then the military has chosen to "eat the cost." The article figures such losses amount to between $9 million and $18 million annually. This figure, it points out, does not include the training spent on the enlisted service members discharged each year. The dominant frame here is that of DOD wasting taxpayers' money through the enforcement of a highly questionable policy.

In June 1989, the San Francisco Examiner estimated it cost the taxpayers $251 million to oust gay and lesbian service mem-

bers between 1973 and 1989. It also estimated it would cost at least $2.5 billion to oust all homosexuals from the U.S. military.[81] Rarely were any of these points made by newspapers or news magazines, much less used as a way to frame the issue.

Another possible way to frame the issue, only occasionally hinted at, is the potential effect "witchhunts" for gay and lesbian service members may have on unit morale, particularly among female service members. Although there are far fewer women in the armed forces, women are dismissed three times more often than men for homosexuality, and eight times as often in the Marine Corps.[82] An example of a case where unit morale could have been adversely affected involved two female Marines who served as character witnesses for another one court-martialed for "indecent acts" with another female Marine. For giving such testimony, these two character witnesses were punished by premature reassignment and an alteration to their records, which showed they were unsuccessful in completing the first assignment. These tactics, along with briefings about the punishment, attorneys charged, were designed to frighten others from giving such supporting testimony.[83] Such actions can have a detrimental effect on unit morale, yet this framing device was never used. This case is mentioned only near the end of an article as one of the reasons the original court-martial was being reviewed.

It is obvious this issue could be framed in a variety of other ways. This begs the question of why the framing devices found in this study were used. The literature review suggested the way the media frames an issue reflects contemporary social

standards, or to put in another way, the status quo. Inherent in an examination of this proposed explanation is the problem of defining contemporary social standards. It is well beyond the scope of this study to attempt any authoritative definition. Yet it is possible to gain some insight into these standards and into the question of whether the news media reflect them through the framing devices employed here.

The first PERSEREC study, "Nonconforming Sexual Orientations and Military Suitability," provides a good overview of what that study terms "the social construction" of homosexuality.[84] It identifies four influences or factors, which are "abundant in contemporary life" although they arose in different historical periods.[85] The first is the morality factor, which is based upon the idea that "Judeo-Christian moral rules as represented in the Bible" are the basis for defining homosexual "behavior" as immoral and sinful. Although fundamentalist preachers still advocate such beliefs,[86] many Christian and Jewish groups no longer subscribe to them. The second is the legal factor, which is a direct result of the moral one when "legislative acts were introduced to control nonprocreative sexual behavior." Such "crimes against nature," a term which usually includes sexual acts between members of the same sex, are still included in the criminal codes of the U.S. military and in the codes of about half the states.[87] The third is the sickness factor, which arose in the nineteenth century. It became the reason that justified the policy of excluding gays and lesbians from the military during World War II and its aftermath. While most mental health professionals

no longer subscribe to it, such a change has been relatively recent so its impact today cannot be disregarded.[88] The fourth is the minority group factor, which is historically the latest. It uses "same-gender sexuality as the defining property of a nonethnic, nonracial minority group" deserving of the same rights and privileges as the rest of society without "discrimination, harassment and rejection."[89]

These factors would indicate contemporary social standards are mixed when it comes to defining societal attitudes about homosexuality. Given the large population of fundamentalist Christians in the United States, the morality factor continues to have strong influence. The laws concerning "crimes against nature" are rarely enforced, yet their mere existence supports the legal factor, which gives more influence to the morality factor. The sickness factor, because it has only recently been generally disavowed, also still gives support to the morality factor.[90] The minority group factor has become the other dominant influence.

This creates a clash between two strong, almost mythical, American traditions: one that could be designated as traditional, Christian, moral, family values and the other as a strong respect for individual rights. The clash of these two traditions creates the mix of what could be characterized as a simplified view of contemporary social standards. This conclusion is supported by a San Francisco Examiner national poll published in 1989.[91] Pollster Steve Teichner is quoted saying, "What the results said is that it's [homosexuality] OK if it happens in a courtroom, but it's not OK if it's my neighbor. The closer you bring it to our

day-to-day lives, the stronger the moral objection is." Teichner continued, "I was surprised at the high number who thought it would be discrimination to deny a job based on sexual orientation, but balked at two people of the same sex living together."[92] A July 1991 poll published in Time magazine also reflects this dislike of job discrimination. It reported 58 percent of those polled felt gays and lesbians should not be banned from military service, while only 35 percent said they should.[93]

Assuming this discussion gives a legitimate idea of contemporary social standards, it can then be argued they are reflected in the news media's framing of this issue. The framing devices of gays and lesbians as sexual deviants and as immoral are clearly found within the morality, legal and sickness factors. The framing device of gay rights as a liberal cause derives from the conflict between "conservatives" who subscribe to the morality factor and "liberals" who subscribe to the minority group factor. The framing device of gays and lesbians as victims can be traced in two ways. As a victim of a system, it would derive from the minority group factor, while as a victim of their own homosexuality, it would derive from the morality, legal and sickness factors. Finally, the framing device of gays and lesbians as different would derive from all the factors.

It appears the framing devices found in this study do reflect contemporary social standards, or the status quo. This brings us to the final question proposed for discussion. Do the media frame this issue in a way that legitimizes the status quo, a status quo which marginalizes the gay and lesbian minority?

The term status quo can be used both broadly and narrowly. In the broad sense, it is assumed to be synonymous with contemporary social standards, and therefore, the previous discussion suggests the framing devices used do serve to legitimize the status quo. But in the narrow sense, the status quo is the current DOD policy that bans gay men and lesbians from military service. Here the analysis on objectivity and sources would suggest the news media do serve to legitimize the policy by quoting it extensively without challenge. Furthermore, since DOD refused to comment on the policy, the use of extensive, largely unnamed sources to provide supporting "facts" created, in Tuchman's words, a "web of facticity," which allowed the media to talk of gays and lesbians as a threat to morale.[94] Such comments are rarely challenged by the news media itself. Such challenges, as dictated by the conventions of objectivity, are usually left to gay and lesbian service members and their representatives. The reader is then presented with two sides of the issue with the final conclusion left to his or her judgement. This gives legitimacy to both sides, whether deserved or not,[95] but as Bennett commented, one side is usually "much closer to home than the other."[96] In this case, it is certainly arguable the side closest to "home" is the military one.

The second part of this final question concerns the assumption that the status quo marginalizes the gay and lesbian minority; that if the news media are found to legitimize the status quo, by extension, they contribute to the marginalization of the gay and lesbian minority.

The morality, legal and sickness social factors and the framing devices that reflect gays and lesbians as different, as immoral, as sexually deviant and as victims of their own homosexuality portray them as a marginal, if not deviant, minority. They certainly work to set them apart, to make them "other than us." In the narrow sense, the DOD policy, by defining them as unsuitable for military service because they are a threat to morale and discipline, can hardly be interpreted as anything less than an overt effort to marginalize them. Therefore, the news media, through the process of legitimizing this status quo, work to maintain the marginal status of the gay and lesbian minority.

CONCLUSION

In presenting the public debate of the suitability of gay men and lesbians for U.S. military service, the mainstream print news media have framed the issue as DOD verses a politically liberal, immoral, sexually deviant, victimized minority. This is a frame which emphasizes differences, focuses on the "other than us" status of gays and lesbians. It is a frame which reflects the contradictions of contemporary social standards -- standards based upon a traditional Judeo-Christian condemnation of homosexuality and standards based upon a civil libertarian respect for individual rights. It is a frame that serves to legitimize these social standards and the DOD policy, and because of this, the frame works to maintain the marginal status of gay and lesbian service members and all members of the gay and lesbian minority.

As Stuart Hall might argue, this frame is not because the media is run exclusively by homophobes. In fact, most of the

news articles in this study were arguably neutral or even sympathetic in tone. It is the structure of the media and the set of journalistic practices "not reducible to individuals" that have such an influence on how this issue was framed.[97] It is the assumption that news is about conflict, events, the individual; that it needs narrative at the expense of explanation, to present two sides, to quote official and elite sources, and supporting "facts."[98] These assumptions are at the heart of the journalistic conventions that have had such a great influence on the way this issue was framed.

In 1947, the Commission on Freedom of the Press, chaired by Robert M. Hutchins, issued its report, which listed "five ideal demands of society for the communication of news and ideas." Among these were: "A truthful, comprehensive, and intelligent account of the day's events in a context which gives them meaning," and "the projection of a representative picture of the constituent groups in the society."[99] This study would suggest that the framing of this public debate about the military ban against gay men and lesbians is neither done in a "context which gives it meaning," nor is "a representative picture" of the gay and lesbian minority being presented.

Neither of these failings is beyond remedy. The first step, after realizing there is a problem, is for those involved to become educated about it. The nation's newspapers and news magazines have made progress in recent years in their coverage of the gay and lesbian minority. It has become more representative and meaningful.[100] At the same time a report by the Human Resources

Committee of the American Society of Newspaper Editors indicates much still needs to be done.[101] But the problem has been recognized. Indeed, the fact such a report has been made is considerable progress.

But what this study suggests is that it will take more than sensitivity to the gay and lesbian minority to fully rectify these failings. The underlying assumptions about what constitutes news and the traditional journalistic conventions about how news is gathered and presented contributed to the framing of this particular issue. To change that, news coverage needs to focus on underlying conditions and on the facts that explain an issue rather than facts that simply advance the story. News coverage must also shift from its emphasis on conflict to one that also looks for consensus, for common ground. Finally, news reporters and editors must publicly acknowledge they are not simply conduits of information from source to consumer, but that they actively shape the way the news is presented and viewed. Only by destroying the myth of objectivity and its attendant ritual can they empower themselves to become active participants in solving society's problems.

NOTES

[1]Kate Dyer, ed., Gays in Uniform: The Pentagon's Secret Reports (Boston: Alyson Publications, 1990) xiv.

[2]See Allan Berube, Coming Out Under Fire: The History of Gay Men and Women in World War II (New York: Free, 1990); Mary Ann Humphrey, My Country, My Right To Serve: Experiences of Gay Men and Women in the Military, World War II to the Present (New York: Harper Collins, 1990); Colin J. Williams and Martin S. Weinberg, Homosexuals and the Military: A Study of Less Than Honorable Discharge (New York: Harper, 1971); Lawrence R. Murphy, Perverts by Official Order: The Campaign Against Homosexuals by the United States Navy (New York: Harrington Park Press, 1988); E. Lawrence Gibson, Get Off My Ship: Ensign Berg vs. the U.S. Navy (New York: Avon, 1978); Mike Hippler, Matlovich: The Good Soldier (Boston: Alyson Publications, 1989); and Jospeh Harry, "Homosexual Men and Women Who Served Their Country," Bashers, Baiters & Bigots: Homophobia in American Society, ed. John P. De Cecco (New York: Harrington Park Press, 1985) 117-25.

[3]See Dyer; Berube 277-78; and Gibson 358-65.

[4]For examples, see Humphrey, particularly for the entries on Vernon "Copy" Berg, III, 72-79; Leonard Matlovich, 151-55; Barbara Baum, 178-186; Miriam Ben-Shalom, 187-192; Joseph Steffan, 235-242; and Perry Watkins, 248-257.

[5]Larry Gross, "The Ethics of (Mis)representation," Image Ethics, eds. Larry Gross, John Stuart Katz and Jay Ruby (New York: Oxford UP, 1988) 190-91.

[6]Richard V. Ericson, Patricia M. Baranek and Janet B. L. Chan, Visualizing Deviance: A Study of News Organizations (Toronto: University of Toronto Press, 1987) 348.

[7]Todd Gitlin, The Whole World Is Watching: Mass Media in the Making & Unmaking of the New Left (Berkeley, CA: University of California Press, 1980) 11-12.

[8]See Denis McQuail, "From Bias to Objectivity: Competing Paradigms for News Analysis and a Pluralistic Alternative," Studies in Comunication vol. 3 (Greenwich, Conn.: JAI Press, 1986) 2.

[9]Mitchell Stephens, A History of News: From the Drum to the Satellite (New York: Viking 1988) 264.

[10]See Tom Koch, The News As Myth:Fact and Context in Journalism (New York: Greenwood Press 1990) 20.

[11]Herbert J. Gans, Deciding What's News (1979; New York: Vantage, 1980) 39-40.

[12]Robert Karl Manoff and Michael Schudson, "Reading the News," Reading the News eds. Robert Karl Manoff and Michael Schudson (New York: Pantheon Books, 1986) 6.

[13]Koch 20.

[14]Gaye Tuchman, "Objectivity as Strategic Ritual: An Examination of Newsmen's Notions of Objectivity," American Journal of Sociology 77.4: 660.

[15]Tuchman "Objectivity" 663-671.

[16]Koch 20.

[17]Rachin 11.

[18]Gaye Tuchman, Making News: A Study in the Construction of Reality (New York: Free, 1978) 1.

[19]Tuchman News 192.

[20]Tuchman News 12.

[21]Mark Fishman, Manufacturing News (Austin: University of Texas Press, 1980) 28.

[22]Fishman 16-17

[23]Fishman 32.

[24]Fishman 78-80

[25]Fishman 154.

[26]Tuchman News 5.

[27]Gitlin 27-28.

[28]Sigal 190.

[29]Jane Delano Brown, Carl R. Bybee, Stanley T. Wearden and Dulcie Murdock Straughan, "Invisible Power: Newspaper News Sources and the Limits of Diversity," Journalism Quarterly 64 (1987): 45-54.

[30]W. Lance Bennett, News: The Politics of Illusion 2nd ed. (New York: Longman, 1988) xii-xiv.

[31]Rachlin 127.

[32]Bennett 27.

[33]Bennett 73.

[34]Gary Atkins and William Rivers, Reporting with Understanding (Ames, Iowa: Iowa State University Press, 1987) 213.

[35]Larry Gross, "Out of the Mainstream: Sexual Minorities and the Mass Media," Remote Control: Television, Audiences, and Cultural Power, eds. Ellen Seiter, Hans Borchers, Gabriele Kreutzner, and Eva-Maria Warth (New York: Routledge, 1989) 134.

[36]Thomas Waugh, "Lesbian and Gay Documentary: Minority Self-Imaging, Oppositional Film Practice, and the Question of Image Ethics," Image Ethics eds. Larry Gross, John Stuart Katz and Jay Ruby (New York: Oxford UP, 1988) 249.

[37]Gross "Mainstream" 131.

[38]Gross "Ethics" 195.

[39]Frances FitzGerald, Cities on a Hill (New York: Simon, 1986) 31.

[40]Sean O'Neil, "The Role of the Mass Media and Other Socialization Agents in the Identity Formation of Gay Males," Studies in Communication vol. 1, ed. Sari Thomas (Norwood, N.J.: Ablex Publishing, 1984) 205.

[41]Gross "Ethics" 190.

[42]Gross "Ethics" 196.

[43]For example, see Neil Miller, In Search of Gay America: Women and Men in a Time of Change (New York: Atlantic Monthly Press, 1989) 10. But the concept of marginality is poorly defined. It is still evolving from roots in both Marxism and sociology. It has only recently been used, as defined here, to describe the position of the gay and lesbian minority in American society. For a further discussion of the concept, see Gino Germani,

Marginality (New Brunswick, NJ: Transaction Books, 1980); and Edward Sagarin, Deviants and Deviance: An Introduction to the Study of Disvalued People and Behavior (New York: Praeger Publishers, 1975) 34-40.

[44]Chesebro xiii.

[45]Gitlin 303. For a greater discussion of this method, see Gitlin 303-305 and Rachlin 141-142.

[46]A search was conducted by a university research-staff librarian using the NEXIS system, which according to their information is "an online database system containing citations to several hundred newspapers, wire services, newsletters . . . . Of particular importance are the very current files of major U.S. newspapers (indexed within 24 hours of date of publication), UPI and Reuters wire services . . . ."

[47]Gitlin 28.

[48]Elaine Sciolino, "Report Urging End Of Homosexual Ban Rejected by Military," New York Times 22 Oct. 1989: 1, 24.

[49]See Fishman.

[50]Mark Miller and John Taliaferro, "Under Cover, in the Closet," Newsweek 14 Jan. 1991: 25.

[51]Scott Brown, Tom Curry and Bruce van Voorst, "Marching Out of The Closet," Time 19 Aug. 1991: 14.

[52]Peter Cary, "The Pentagon's fight to keep gays away," U.S. News and World Report 20 Nov. 1989: 57.

[53]Jane Gross, "For Gay Soldiers and Sailors, Lives of Secrecy and Despair," New York Times Apr. 10, 1990: A1, D20.

[54]Howard Schneider, "The Case Of The Gay Midshipman," The Washington Post Magazine 26 Nov. 1989: 28-46.

[55]Howard Schneider, "Rethinking DOD Policy on Gays," Washington Post 6 Nov. 1989: A11.

[56]Doyle McManus, "Challenge to Military's Anti-Gay Stance Found in Report Dismissed by Pentagon," Los Angeles Times 23 Oct. 1989: A11.

[57]Tuchman "Objectivity" 663-671.

[58]Robert J. Bresler, "The Military and Gay Rights," USA Today Nov. 1990: 9. Note this is different from the national Gannett newspaper USA Today.

[59]Sciolino 24.

[60]For a full analysis, see Richard D. Mohr, Gays/Justice: A Study of Ethics, Society, and Law (New York: Columbia UP, 1988) 194-199.

[61]Jane Gross, "Navy Is Urged to Root Out Lesbians Despite Abilities," New York Times 2 Sept. 1990: 24.

[62]Tuchman News 86.

[63]Tuchman News 93.

[64]Dyer 7.

[65]Dyer 39.

[66]Joel Millman, "Colonel Sentenced to prison," Colorado Springs Gazette Telegraph 26 Oct. 1990.

[67]Nora Zamichow, "Isolation Painful for Partners of Gays in Service," Los Angeles Times 3 Feb. 1991: A12.

[68]Marc Kaufman, "Risking their lives in war -- but facing dismissal," Philadelphia Inquirer 20 Jan. 1991.

[69]Bruce E. Drushel, "Sensationalism or Sensitivity: Use of Words in Stories on Acquired Immune Deficiency Syndrome (AIDS) by Associated Press Videotext," Gay People, Sex, and the Media eds. Michelle A. Wolf and Alfred P. Kielwasser (New York: Harrington Park Press, 1991) 57.

[70]Simon Watney, Policing Desire: Pornography, AIDS and the Media (Minneapolis: University of Minnesota Press, 1987) 90.

[71]Cindi Ross Scoppe, "Marine Corps reviewing court-martial," (Columbia, SC) State 21 Mar. 1990, and Cindi Ross Scoppe, "Military Secrets," (Columbia, SC) State 26 Apr. 1990.

[72]Gary Massaro and Ted Prior, "Army's case 'homophobia,'" Rocky Mountain News 28 Sept. 1990.

[73]"Gay Annapolis Graduate in Tuition Dispute," New York Times 25 Sept. 1990: 18.

[74]See Humphrey 248-257.

[75]Bob Secter, "Wisconsin U: Faculty Votes to Expel ROTC Program," Los Angeles Times 5 Dec. 1989: A1.

[76]Bill Peterson, "Faculty Seeks ROTC's Ouster over Policy on Gays," Washington Post 5 Dec. 1989: A14.

[77]Catalina Camia, "Gay groups assail investigation of servicemen at Carswell base," Dallas Morning News 1 June 1990.

[78]Sciolino 24.

[79]Jacob Weisberg, "Gays in Arms," The New Republic 19 Feb. 1990: 20-21, 25.

[80]Weston Kasova, "ROTC Ya Later," The New Republic 19 Feb. 1990: 24.

[81]"Gay in America," San Francisco Examiner, reprint of special report, June, 1989: 12. The $2.5 billion cost estimate is based on the assumption that the military is 10 percent gay.

[82]Weisberg 20.

[83]Scoppe "Marine."

[84]Dyer 17.

[85]Dyer 17-24.

[86]Dyer 18-19.

[87]Dyer 19-21; and Editors of the Harvard Law Review, Sexual Orientation and the Law (Cambridge, Mass.: Harvard UP, 1990) 9.

[88]Dyer 21-23.

[89]Dyer 23-24.

[90]See William Dannemeyer, Shadow in the Land: Homosexuality in America (San Francisco: Ignatius Press: 1989).

[91]"Gay in America" 9-10, 13. Margin of error was 1.7%.

[92]"Gay in America" 9.

[93]"VOX POP," Time 12 Aug. 1991: 11. Margin of error was 3%.

[94]See Tuchman News 93.

[95]See Stuart Hall, "The Whites of Their Eyes: Racist Ideologies and the Media," Silver Linings, eds. George Bridges and Rosalind Brant (London: Larences and Wishart, 1981) 28. Hall's article discusses racial minorities rather than sexual ones, but his argument appears applicable in this case as well.

[96]Bennett 27.

[97]See Hall 46.

[98]See Gitlin 27-28; and Tuchman "Objectivity" 663-671.

[99]Robert M. Hutchins et. al., "A Free and Responsible Press: Report of the Commission on Freedom of the Press," The Responsibility of the Press ed. Gerald Gross (New York: Fleet Publishing, 1966) 30.

[100]Roger Simpson, "Papers Made Progress, But 'Problem' Prevails," Alternatives: Gay & Lesbians in the Newsroom (American Society of Newspaper Editors, Human Resources Committee Report, 1990) 63-65.

[101]Alternatives: Gay & Lesbians in the Newsroom (American Society of Newspaper Editors, Human Resources Committee Report, 1990).

APPENDIX 1

TABLE 1
NEWS ARTICLES EXAMINED IN STUDY

Article	Date	Page
Annapolis Capital:		
"Navy demands gay ex-officer repay tuition"	9/23/90	*
Boston Globe:		
"Military seeks third study of policy on gays"	11/2/89	*
Colorado Springs Gazette Telegraph:		
"Colonel sentenced to prison"	10/26/90	*
Columbia State (S.C.):		
"Marines say lesbian trial unfair"	1/10/90	*
"Marine Corps reviewing court-martial"	3/21/90	*
"Military Secrets"	4/26/90	*
Dallas Morning News:		
"Gay servicemen say Carswell is forcing them out"	1/5/90	*
"Gay groups assail investigation of servicemen at Carswell base"	1/6/90	*
"Ex-cadets to join in gay pride event"	6/11/90	*
"War renews battle to end ban on gays in U.S. armed forces"	2/21/91	*
Denver Rocky Mountain News:		
"Army's case 'homophobia'"	9/28/90	*

Table 1
(Continued)

Article	Date	Page
Los Angeles Times:		
"Challenge to Military's Anti-Gay Stance Found in Report Dismissed by Pentagon"	10/23/89	A11
"Wisconsin U: Faculty Votes to Expel ROTC Program"	12/5/89	A1
"High Court Lets Military's Ban on Gays Stand"	2/27/90	A1
"Lesbian Scheduled for Gulf Duty Faces Discharge"	1/12/91	A23
"Army Hospital Worker Discharged for Lesbianism"	1/18/91	A36
"Isolation Painful for Partners of Gays in Service"	2/3/91	A12
"Lawyers Cite Sexual Slur, Want Judge Off Cadet Case"	3/10/91	A23
Newsweek:		
"Under Cover, in the Closet"	1/14/91	25
New York Times:		
"Report Urging End of Homosexual Ban Rejected by Military"	10/22/89	1
"In Rare Vote, Faculty To Decide on R.O.T.C."	12/3/89	67
"Ouster Voted For R.O.T.C. In Wisconsin"	12/6/89	B15
"Marine Sues Navy Over a Demotion"	1/2/90	A16
"Court Overturns Conviction Of Female Marine in Sex Case"	2/19/90	A10

Table 1
(Continued)

Article	Date	Page
New York Times:		
"Justices Refuse to Hear Challenge To Military Ban on Homosexuals"	2/27/90	1
"Gay Cadet Is Asked to Repay R.O.T.C. Scholarship"	3/2/90	A10
"For Gay Soldiers and Sailors, Lives of Secrecy and Despair"	4/10/90	A1
"M.I.T. Provost Enters Dispute Over R.O.T.C."	4/19/90	22
"R.O.T.C. Wins Some Battles, But Foes Fight On"	4/22/90	I44
"Harvard Council Criticizes R.O.T.C.'s Homosexual Ban"	5/4/90	18
"R.O.T.C. Under Siege for Ousting Homosexuals"	5/6/90	24
"Navy Drops Efforts To Seek Repayment From 2 Gay Students"	5/9/90	19
"Colleges Ask Military to Enlist Homosexuals"	5/17/90	A17
"Gay R.O.T.C. Cadet Keeps Study Fund"	5/21/90	A18
"Harvard Protesting R.O.T.C. Rejection of Homosexuality"	6/15/90	A11
"Anti-Bias Policy Could Start R.O.T.C. Conflict"	6/24/90	I32
"Navy Is Urged to Root Out Lesbians Despite Abilities"	9/2/90	24
"Gay Annapolis Graduate in Tuition Dispute"	9/25/90	18
"Faculty Protests Military Recruiting"	10/7/90	6

Table 1
(Continued)

Article	Date	Page
New York Times:		
"Gay Soldier Wins Battle to Re-enlist"	11/6/90	16
"Campus Warns Army on Bias"	12/17/90	B11
"Reservist Headed for the Gulf Challenges Homosexual Ban"	1/11/91	A14
"Lesbian Is Discharged From Army Reserves"	1/20/91	18
"Ending Long Fight, Ousted Gay Soldier Settles With Army"	1/13/91	B6
"Judge Urged to Quit Homosexual's Case; Remarks Called Slur"	3/13/91	A23
"Judge Denies Bias in Calling Plaintiff a 'Homo' in Court"	4/14/91	19
Philadelphia Inquirer:		
"Risking their lives in war -- but facing dismissal"	1/20/91	*
Time:		
"Marching Out of The Closet"	8/19/91	14
U.S. News & World Report:		
"The Pentagon's fight to keep gays away"	11/20/89	57
Wall Street Journal:		
"Gay GIs Told, Serve Now, Face Discharge Later"	1/24/91	B1
Washington Post:		
"Rethinking DOD Policy on Gays"	11/6/89	A11

Table 1
(Continued)

Article	Date	Page
Washington Post:		
"The Case of the Gay Midshipman" (from The Washington Post Magazine, a Sunday supplement)	11/26/89	28
"Faculty Seeks ROTC's Ouster Over Policy on Gays"	12/5/89	A14
"Lesbian in Army Reserve Gets Approval to Go to Gulf"	1/12/91	A17
"MIT Provost Urges Military to Lift Ban On Gays in ROTC"	4/15/91	A25
Washington Times:		
"High court upholds military ban on homosexuals"	2/27/90	*

* Articles provided by Newsbank Electronic Information System, which gives no page number.

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Testing Opposing Views of the Audience:

How The Active Television Viewer Selects Programs

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Paper presented at the annual meeting of the Association for Education in Journalism and Mass Communication, Montreal, August, 1992.

ABSTRACT

Testing Opposing Views of the Audience:
How The Active Television Viewer Selects Programs

This paper tests two competing views of how and when the television audience selects programs to watch. The uses and gratifications perspective contends that the active audience seeks out programs that will fulfill psychological and social needs. Contrasting this approach is the passive audience perspective which argues viewing selections involve little thought or effort. Proponents of this view argue people first decide to watch television and then select a program. The passive viewer perspective is an important tenant of cultivation theory (Gerbner, Gross, Signorielli, Morgan, and Jackson-Beeck, 1979), has been incorporated into program choice models (Goodhardt, Ehrenberg, & Collins, 1975; Webster, and Wakshlag, 1983), and has become a part of the received literature summarizing the relationship between television and social behavior as it is described in many reviews (Cf. Comstock, Chaffee, Katzman, McCombs, and Roberts, 1978).

A national probability sample of prime time television viewers reported individual program decision making behavior for a representative sample of their viewing in a one hour, in-person interview. Results indicate the old adage that people first decide to watch TV and then select a program is simply wrong. Viewers know what it is they will watch before they come to the television set. About two-thirds of the viewing was decided on in advance, while about one-third of the viewing decisions were made at the time people sat down to watch. Only nine percent of program decisions were truly passive where viewers merely watched what came on next. These results lend considerable support to the uses and gratifications perspective of active audience program selection.

Testing Opposing Views of the Audience:

How The Active Television Viewer Selects Programs

While the uses and gratifications perspective of the television audience describes the viewer as actively seeking programs that fulfill psychological and social needs, conventional wisdom for many in the field of mass communication dictates that viewing is a passive activity and involves little thought or effort. Viewers are thought first, and most importantly, to decide to watch television, and secondly to choose a program from among those available. An important implication of this assumption is that a given program's audience is largely dependent on the audience available to watch at that time, and that viewers do not seek out specific programs in advance. The passive viewer perspective is an important tenant of cultivation theory (Gerbner, Gross, Signorielli, Morgan, and Jackson-Beeck, 1979), has been incorporated into program choice models (Goodhardt, Ehrenberg, & Collins, 1975; Webster, and Wakshlag, 1983), and has become a part of the received literature summarizing the relationship between television and social behavior as it is described in many reviews (Cf. Comstock, Chaffee, Katzman, McCombs, and Roberts, 1978). The uses and gratifications perspective and the passive viewer perspective offer very different explanations of how and when the audience decides to watch specific programs. This paper reports a test of these competing views of the audience.

Testing program selection processes is important because the results may

shed light on the veracity of these conceptualizations of the audience and their attendant implications about television's impact. When the audience is thought to be passive, there is a greater potential for direct effects, while the active audience conceptualization calls for limited impact.

Program Choice Models

The program choice modeling literature contends that patterns of repeat viewing levels (the percentage of the audience of one program coming back and viewing a subsequent episode of the same program) have been decreasing over time and indicates that active audience program selection does not take place (Goodhardt, Ehrenberg, & Collins, 1975, 1987; Barwise, Ehrenberg, & Goodhardt, 1982; Barwise, 1986; Ehrenberg & Wakshlag, 1987). This view has recently been challenged by Lometti, Hyams, and Zhang (1992) who demonstrate active audience program selection across the prime time television viewing season utilizing national Nielsen television ratings. They show that individuals demonstrate purposive program selections because about 50% of the average new network television program's audience for the entire season will have watched the first four telecasts of the program. The total audience that any given new network program will accumulate over the course of the season actively seeks these programs during the first four telecasts that are broadcast. It seems that after they watch the programs they make a decision about whether or not they will come back to the program in the future. Another way to more directly test the program choice models' assumptions about how and when program selections are made is to empirically examine them. The present study explores this

program decision-making process from a uses and gratifications perspective.

Uses And Gratifications Research

Within the uses and gratifications perspective, audience activity is conceptualized in a variety of ways. This paper is concerned with activity in program choices. Such a conceptualization falls into the selective exposure-seeking category discussed by Levy and Windahl (1984). They view activity as it occurs between two dimensions: audience orientation and communication sequence. This view results in three major categories of audience activity: audience selectivity before exposure, audience involvement during exposure, and audience utility following exposure. The selective exposure-seeking activity concerns itself with the decisions viewers make before exposure to television. They are thought to be the result of a viewer's desire to satisfy psychological and social needs and are modified by one's experience with television and its programs' ability to satisfy their needs.

Television Program Selections

Past research studies into the program selection process are quite limited in number. Two national probability sample surveys conducted in 1970 and 1980 showed that about three quarters of the adults said that they "often" watch the same shows because they like them and know when they are on (Bower,1985). These studies did not tap directly the decision making process and they asked general questions about viewing. This method of asking general viewing questions is a significant shortcoming. Such questions often result in meaningless answers because the decisions about programs are going to change depending upon the

specific program seen, its ability to satisfy needs, and the circumstances viewers find themselves in when watching it. If asked, in general, "How often to you plan in advance to watch television programs?" The most likely answer is that it depends.

LoSciuto (1971) surveyed 252 households in a national probability sample. He collected two kinds of data: diary data over the course of one week; and interview data about last night's viewing. Results from both data sources indicated that the majority (about two thirds) of viewing was planned in advance, about one quarter occurred because respondents watched a channel to which they happened to be tuned, and about 10% was due to someone else's viewing decision. Taken together, both the Bower and Loscuito studies show that most viewers report the majority of their viewing is purposive. However, Losciuto, and Lyle in his 1971 summary chapter of this research, conclude that viewing is relatively opportunistic and unplanned, despite the fact that the data clearly show the opposite! Because the Losciuto data are more than twenty years old and the television viewing landscape has changed so radically with the proliferation of viewing choices, it is not possible to know just how purposive the viewing audience is today in the selection of programs. Further, Losciuto reported only a few decision options-- deciding in advance, watching just because the program came on the channel to which they were tuned, or because someone else wanted to watch the program. At least two additional decision making strategies would seem to be worth investigating: flipping channels to see what was on, and using a viewing guide to decide what to watch.

More recent data can be found in a two-market study, by Television Audience Assessment (1983), who reported that 75% of respondents said they watched a program broadcast between 6pm and midnight because it happened to catch their interest. These data were obtained from a near coincidental telephone interview on two nights with 454 respondents who answered questions about one specific program that they had just watched. The generalizability of these results from only two markets, studying one program from two nights viewing, is open to question.

Additional data came from viewing diaries filled-out over a two week period on programs viewed between 6pm and midnight. Only 43% of the contacted households completed usable diaries in this study. Almost half of the programs watched during this two week period were selected in advance of viewing. Despite these data, the authors argued that program selection is not planned in advance but rather at the time of viewing. The report goes on to note that 53% of people who watch more than two hours in an evening plan ahead to see their programs, only 42% of those who watch less than 2 hours plan in advance.

In 1986, Television Audience Assessment (TAA) conducted a similar study with a national sample of daytime television viewers. Here, 80% of the daytime programs were planned to be watched in advance. It is difficult to say if the differences reported by TAA were due to low completion rates, sampling differences (two-market vs. national), time period differences (daytime vs. evening from 6pm till midnight), or some combination of these and other factors.

It is not reasonable to expect that all viewing choices will be made in a manner that will support either of the audience perspectives discussed here. It seems reasonable to ask, though, which perspective accounts for most of the viewing decisions and with what frequency are each of these decisions made?

The present study was conducted to answer empirically these questions about the viewing choice process. Care was taken to develop a methodology that would look in detail at specific television program choices and not be confounded by asking general viewing behavior questions.

METHOD

This study is based upon a national probability sample of 1,045 adults ages 18 and older. These respondents are representative of the population of the contiguous United States, exclusive of those individuals living in institutionalized settings (i.e. prisons, hospitals, military bases, etc.). A multi-stage, stratified probability sample of interviewing locations was employed.

Information was obtained from each sample member through an in-person interview that lasted approximately one hour. These interviews were conducted from January 20th through February 11th of 1989 by the Roper Organization for ABC.

An approximately equal number of respondents were interviewed across the days of the week. Respondents who viewed prime time television during the past seven days were asked about the shows they viewed the two previous nights, or the last two nights they watched TV within the past seven days. Ninety six percent of the sample (n=1,003) qualified as prime time viewers of the past week. They represent the total sample size for this study. Approximately 75% of these viewers reported their viewing for last night or the night before. The remaining respondents recalled viewing behavior that spanned a greater number of nights, but no longer than 7 days. For both nights they reported viewing, each respondent was handed a viewing guide, and asked to name the programs he/she watched during each prime-time half hour period. For all programs viewed (total programs=3,907), the respondent was then asked questions regarding the viewing decision and the viewing situation. For each program they had watched, they were asked if they decided to watch the program in advance, or by reading a television guide when they sat down to watch, or by flipping the dial to see what was on, or by turning on the TV and finding the program already on, or by watching a program that followed one that they had just seen. They were also asked if they changed channels while they watched the program, and how much attention they paid to the show. In addition respondents were asked various demographic and attitudinal questions.

RESULTS

The main conclusion drawn from this data is that television viewing is

purposive. These results are displayed in Figure One.

Insert Figure One About Here

While 65 percent of all prime-time programs were decided on in advance, only 13 percent of the shows seen were picked from a viewing guide at the time respondents sat down to watch , and 10 percent were selected by flipping around the dial. Finally, only seven percent of all programs viewed were chosen because they were on when the set was tuned to a specific channel when it was turned on, while one percent were seen because they followed a program that respondents had been watching. One percent had some other reason for watching while three percent indicated that they did not know or could not recall how the decision to watch the program was made.

Insert Figure Two About Here

Of the 65% who decided in advance, 37% indicated that they always watched the program. They represent 24% of the total sample of viewing decisions. Because these viewing decisions were made in advance of viewing, we combined these viewing strategies with those responses that indicated advanced planning into one category of those decisions which were planned in advance of viewing. Figure Two displays all of the viewing decision strategies as a percentage of decisions made.

These results soundly support the theory that the television viewing

audience is active. Since the majority of viewing decisions were made before people sat down to watch, these results demonstrate that TV viewing is an active pastime. Television viewers do not first decide to watch television and then decide on a program. Instead, viewing is most often planned in advance of viewing.

That is not to say that un-planned viewing does not take place. About one third (32%) of the viewing falls into this category of decision making. But it is important to note that even when people do not plan their viewing ahead, they still are actively selecting programs through the use of viewing guides (13%) and by flipping around the dial (10%). The truly passive instances where decisions are made because the television happened to be tuned to the program seen accounted for only 7% of all the viewing. Relatively speaking, active viewing far outweighs passive viewing.

The results of this study revealed three characteristics of those viewers who decided what to watch in advance of viewing. First, they were less likely to flip during that show (chi-square=133.88, df=11, $p<.0001$). Results demonstrated that from six to eight percent of viewers who chose a program in advance flipped during that program. Table 1 reports these results.

Insert Table One About Here

Secondly, when viewers chose programs in advance they were more likely

to report paying attention to the shows than when they chose programs by one of the other methods (chi-square=502.59, df=22, p<.0001). Table 2 displays attention levels for the principal decision-making categories by program time period. From 74% to 84% percent of the programs decided on in advance received the audience's attention.

Insert Table Two About Here

Finally, viewers who chose in advance were more inclined to watch network television programming (chi-square=254.25, df=44, p<.0001). Table 3 reports from 73% to 87% of these viewers watched a network show.

Insert Table Three About Here

Chi-square test results revealed significant difference in the degree in which males and females flipped to make their program choices (chi-square=6.58, df=1, p<.01). Males (13%) were more likely to choose this program selection strategy then females (9%).

Also, chi-square tests illustrated that age played a significant role in the flipping to decide strategy (chi-square=60.02, df=2, p<.0001), with those aged 18-24 (14%) most likely to flip to decide, followed by those 25-44 (11%), and those 45 or older (8%).

The most surprising result this study yielded in regard to flipping to

select, was that flipping the dial to select a program had no correlation with owning a remote control. The percentages for flipping to choose in homes with remote control devices were almost equal to those without them. The largest difference which occurred throughout the study was two percent, and this occurred during programs watched between 9pm and 10pm.

Discussion

The results of this study clearly indicate that television viewing decision making is an active process. A mere seven percent of those surveyed watched a program because it was on when the TV set was turned on. Secondly, the majority of television shows watched were decided upon in advance of sitting down to view, and these audiences flipped less while they watched the program, were more attentive, and were the largest group to see network programming. The old adage that people first decide to watch TV and then select a program is simply not true for most adult prime time television viewing. Viewers know what it is they will watch before they come to the set.

In the minority of prime time viewing situations where viewers did not know what they were going to watch before they sat down to view, 13 % of the time they picked a program from a viewing guide. A small number of prime time television programs (10%) were selected for viewing by respondents who flipped around the dial trying to find a suitable show. Young adults and males were most likely to be found among this group.

In only one percent of the viewing decisions did respondents indicate that they watched a program because it followed a program that they had been watching.

These results bring considerable evidence to bear on the question of how viewers make program viewing decisions. These data come from a large, nationally representative sample. Respondents reported on their prime time viewing behavior. A representative sampling of prime time programs was obtained by investigating the two most recent nights in the past seven days that respondents said they watched television. However, these data do not address the viewing decisions people make while watching other television dayparts. Different strategies may operate during these times. It is also possible that decisions may vary by the time of season that viewers are asked about. This study was conducted in the winter. It may be possible that one's strategy changes in the fall when new programs are introduced.

Further potential limitations of this research involve the self report nature of the methodology employed. There may have been a desirability bias in the nature of the questions asked. Respondents may not have been comfortable saying that they just watched the first thing that came on. When people are asked questions about the programs they watched and then how did they decide to watch those programs, it is possible that some respondents may have felt the need to explain their viewing choices in a way that appeared to be very rationale. Therefore they might have said that their viewing choices were decided upon in advance of viewing. The

chances that this actually happened seems remote, however, since so few respondents said that they picked a program from a viewing guide. The picking from a viewing guide strategy would seem to embody the "rationale choice" approach, yet only 13% of the decisions fell into this category.

Future research that addresses TV viewing decisions among other dayparts and during other times of the year will be able to shed light on the generalizability of the results reported here. Analysis of ratings data avoids the potential social desirability limitations discussed above, but falls short of providing insight into the nature of the decision making process. Such analyses have shown that about half of the audience that will watch a new network program over the course of a TV season will see the first four episodes (Lometti, Hyams, & Zhang , 1992). Chance alone would not account for these results. Viewers seem to be making a conscious effort to tune in. Their behavior seems purposive, yet we do not know how they decided to watch those programs. Taken together, these ratings results and this paper's findings that almost two-thirds of adult prime time television viewing is planned in advance of watching, suggest a fruitful area for future research. This would involve the systematic examination of how these purposive behavior patterns develop over time .

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Figure 1

HOW PROGRAM DECISIONS WERE MADE

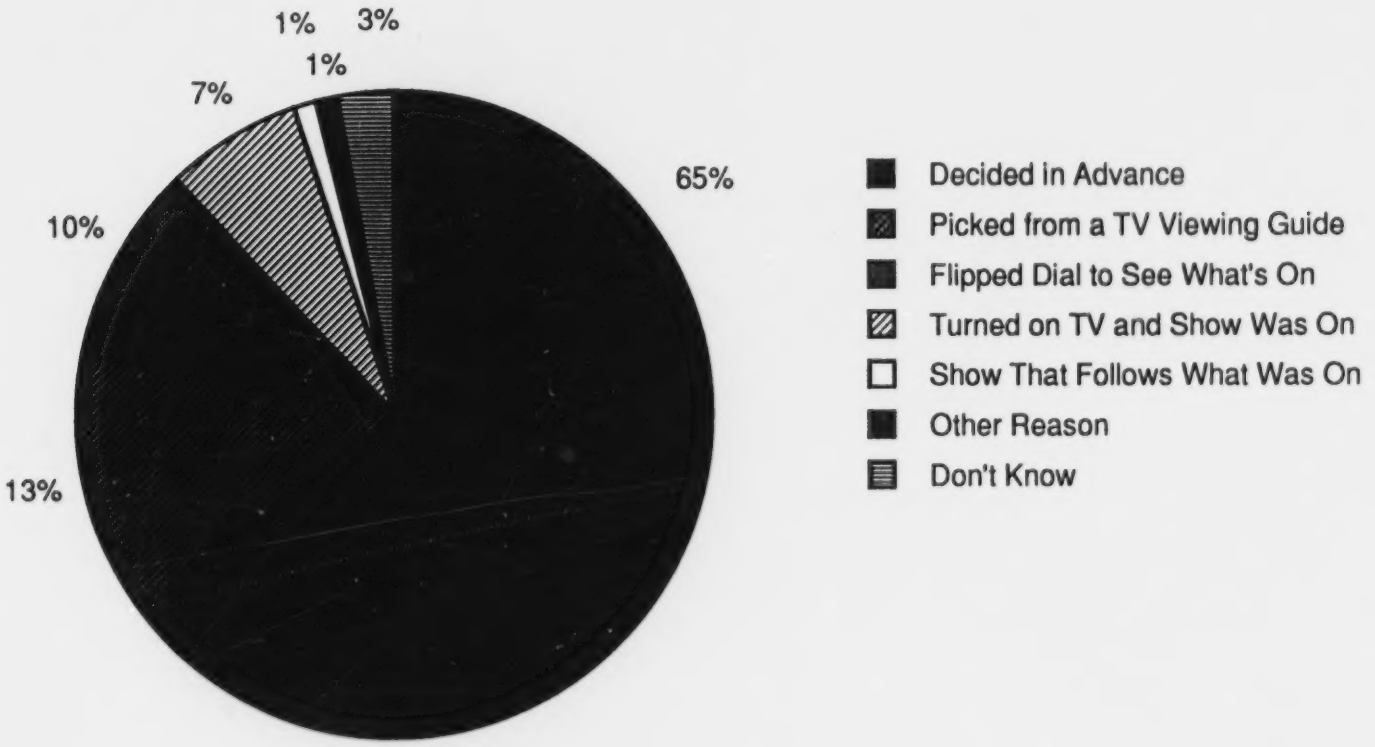

Figure 2

HOW PROGRAM CHOICES WERE MADE

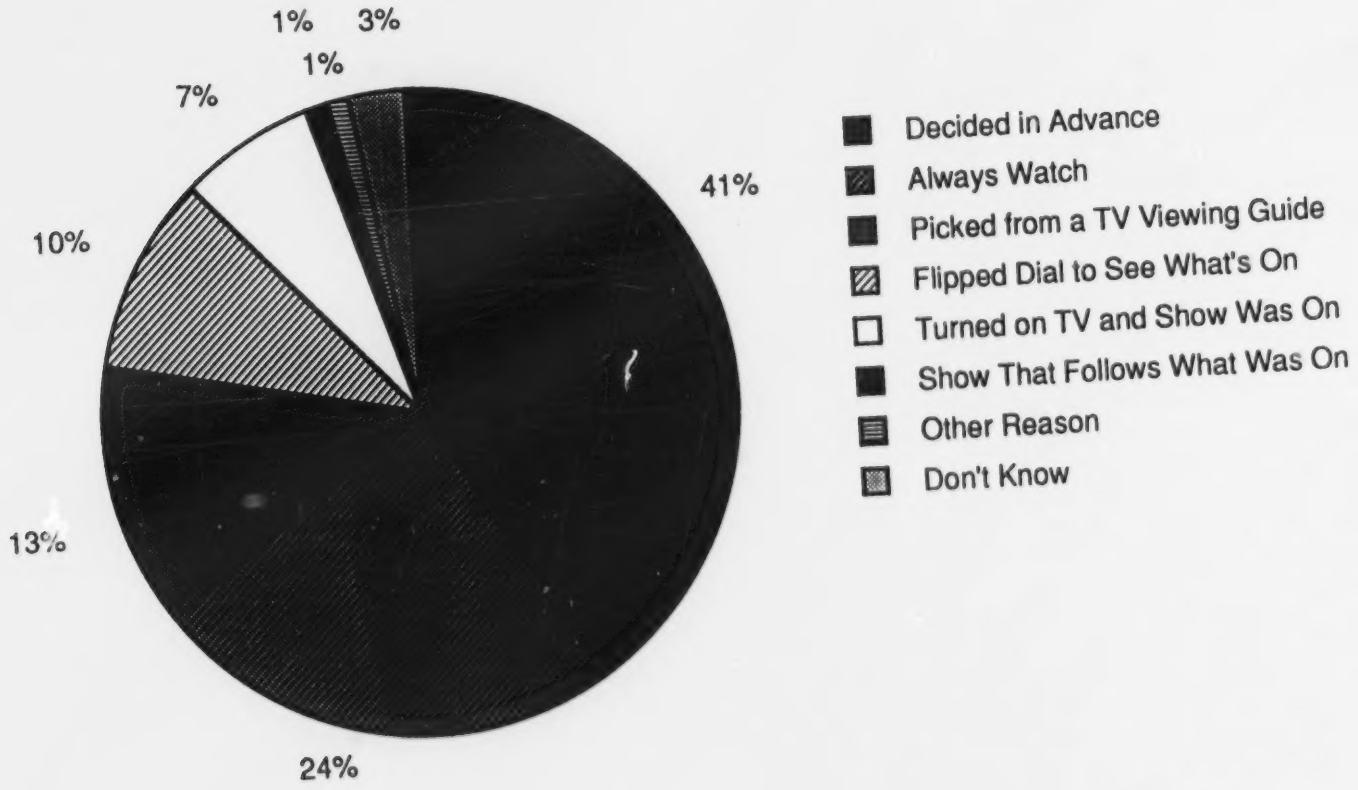

Table 1

When Viewers Decide in Advance, They Are Least Likely to Flip While Viewing

	Time Program Was Watched															
	8:00 PM-9:00 PM					9:00 PM-10:00 PM					10:00 PM-11:00 PM					
	How Did You Decide to Watch Program?					How Did You Decide to Watch Program?					How Did You Decide to Watch Program?					
	In Advance	TV Viewing Guide	Program Was on	Flipped Dial	Sub-total	In Advance	TV Viewing Guide	Program Was on	Flipped Dial	Sub-total	In Advance	TV Viewing Guide	Program Was on	Flipped Dial	Sub-total	Total
Did You Flip During the Show?																
Yes	8%	14%	21%	23%	11%	8%	12%	13%	31%	12%	6%	11%	13%	25%	9%	11%
No	92	86	79	77	89	92	88	88	69	88	94	89	88	75	91	89
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

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Table 2

Viewers Who Decide In Advance Are The Most Attentive

	8:00-9:00 PM How Did You Decide to Watch Program				9:00-10:00 PM How Did You Decide to Watch Program				10:00-11:00 PM How Did You Decide to Watch Program?				
	In Ad-vance	TV Viewing Guide	Program Was On	Flipped Dial	In Ad-vance	TV Viewing Guide	Program Was On	Flipped Dial	In Ad-vance	TV Viewing Guide	Program Was On	Flipped Dial	Total
Did You Pay Attention During the Show	74%	63%	49%	45%	79%	70%	47%	36%	84%	66%	56%	47%	70%
Close Attention	25%	33%	46%	47%	20%	28%	43%	55%	16%	31%	38%	43%	28%
Did Not Pay Attention	1%	4%	4%	8%	1%	2%	10%	5%	0%	2%	6%	10%	3%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Table 3

Most Viewers, and Especially Those That Decide In Advance Which Programs They Will Watch, Choose a Network Television Program

	Time Program Was Watched															
	8:00 PM-9:00 PM					9:00 PM-10:00 PM					10:00 PM-11:00 PM					
	How Did You Decide to Watch Program?					How Did You Decide to Watch Program?					How Did You Decide to Watch Program?					
	In Advance	TV Viewing Guide	Program Was on	Flipped Dial	Sub-total	In Advance	TV Viewing Guide	Program Was on	Flipped Dial	Sub-total	In Advance	TV Viewing Guide	Program Was on	Flipped Dial	Sub-total	Total
Program Watched																
Network Show	83%	62%	76%	63%	78%	87%	73%	86%	69%	82%	73%	66%	67%	57%	70%	76%
Public Television	2	4	1	5	3	2	6	1	2	3	2	7	0	1	3	3
Independent	7	16	9	15	9	4	9	7	9	6	17	12	21	20	17	9
VCR Program	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3
Basic Cable Program	5	10	7	11	6	6	8	2	10	6	6	8	6	10	7	6
Pay Cable Program	2	8	6	6	4	1	5	3	9	3	1	6	6	12	3	3
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

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GENDER AND THE EFFECTS OF TELEVISION VIOLENCE: A META-ANALYSIS

by

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Paper presented at the
Communication Theory and Methodology Division of
the Annual AEJMC National Convention,
Montreal, Canada
August 1992

Running Head: GENDER DIFFERENCES

ABSTRACT

In this meta-analysis, 186 studies on the effects of television violence on aggressive behavior are collected and analyzed to see if there is a gender difference. The analysis shows a great discrepancy in gender representation - 69 studies include males only; in three studies gender is unspecified, and 64 studies do not provide information on gender differences even when the study includes both sexes. Among remaining studies 45 have information on both sexes and five studies involve females only. When the effect sizes of men and women are compared, the meta-analysis suggests that regardless of the sex of the subjects, observation of violence does affect the aggressive behavior of the viewer to the same magnitude. This implies that in this area of inquiry and theory construction in regard to television and film violence, and aggressive and antisocial behavior - in contrast to the general notion that men are more influenced by television violence - females merit equal attention as males, and merit equally any social concerns.

GENDER AND THE EFFECTS OF TELEVISION VIOLENCE: A META-ANALYSIS

Meta-analysis is the quantitative aggregation of research findings and their subsequent interpretation (Cooper, 1984; Glass, et al., 1981; Hedges and Olkin, 1985; Hunter, et al., 1982; Light and Pillemer, 1984; Light & Smith, 1971; Mullen, 1989; Rosenthal, 1984; Wolf, 1986), and has a number of substantial benefits. These include: (a) the basing of conclusions on an objective and comprehensive, rather than selective survey of the literature; (b) the estimation of size of effect from the totality of available data; (c) the quantitative comparison of effect sizes for differing independent variables; (d) the examination of effect sizes by principal factors of interest, such as independent variable, method, and subject and respondent characteristics; and, (e) the mapping of an area of inquiry by various descriptive attributes. Although technically it can be performed when as few as two studies are available, it is most useful when a literature is sizable (Bangert-Drowns, 1986; Comstock, 1983; Light and Smith, 1971), as is the case in regard to television violence, and its effects on aggressive and antisocial behavior. In such a circumstance, it becomes an invaluable complement to narrative and subjective reviews of the same literature, because by addressing the same questions quantitatively and systematically, it offers a check on, and possible challenge to, such reviews.

Most of the studies on the behavioral influence of television violence have been conducted with children and male college students. Even for studies when both female and men are sampled, most of the time the data is not analyzed by gender (Cantor & Orwant,

1980; Hearold, 1979, 1986). Reflecting this, most of the review articles and books do not mention girls separately, but only children, adolescents, and college students (Comstock, 1991; Comstock & Paik, 1987; Condry, 1989; Freedman, 1984; Friedrich-cofer & Huston, 1986; Liebert, Sprafkin, & Davidson, 1982; Liebert & Sprafkin, 1988; Murray, 1980; Roberts & Maccoby, 1985; Stein & Friedrich, 1975; Stipp & Milavsky, 1988).

Despite the small number of studies on females on the behavioral effects from media exposure, there is a common understanding that men are more influenced by television violence than women (Cantor & Orwant, 1980; Comstock, et al., 1978). This can be attributed to social psychological literature in gender differences where men are shown to be more aggressive than women on the average (Cohn, 1991; Eagly, 1987; Eagly and Steffen, 1986; Eagly and Wood, 1991; Hyde, 1984, 1986; Linn, 1986; Maccoby and Jacklin, 1974, 1980). Besides this consensus that men are more aggressive than women, there is no substantial information that explains the conditions under which women and men differ in aggressive behavior, such as (a) the type of program portrayal, (b) the age of the viewer in the appearance or disappearance of the differences, and (c) the types of aggressive behavior.

The purpose of the present study is to extend our knowledge - through meta-analysis of existing primary research studies - regarding the magnitude of effect and conditions under which women and men differ in aggressive behavior as a result of watching television.

Reviews of Gender Differences in Media Violence Studies

There are a few studies that investigate the nature of gender differences in the effects of media violence. Cantor & Orwant (1980) reviewed 26 studies from Surgeon General's

Reports and Papers on Television and Social Behavior, and found a sex difference in aggressive behavior. Unlike Cantor & Orwant's *narrative* mode of research integration, Hearold (1979, 1986) conducted a meta-analysis on 230 published and unpublished studies covering the literature up to 1977. The results on young children show that both genders are influenced by television violence, although for girls the effect declines with age while for boys' it continues to increase.

It has been almost a decade and a half since Hearold collected her data. Since then the data base for surveys, field experiments, and laboratory experiments has increased with additional studies providing a firmer basis for drawing inferences. The literature added during the intervening years allows an analysis of issues that previously had to be ignored because of scanty evidence. For example, studies on the behavioral effects in which the dependent variables are seriously harmful aggressions or criminal acts can now be included. This analysis confines itself, however to comparatively homogeneous outcomes, such as behavioral effects. Hearold pooled stereotyping, materialism, perception of the world as dangerous, and pessimism with aggressive behavior as antisocial outcomes. By restricting the study focus on aggressive behavioral effects, one eliminates the inappropriate combination of findings derived from unrelated conceptual schemes. Hearold focused her meta-analysis primarily on children and young adolescent's aggressive behavior. This study expands the coverage by adding the adult population in the analysis. The principal concrete research question for this study is whether in the retrievable empirical literature to date there is a gender difference in aggressive behavior from watching violent television programs; and if so, in what direction and magnitude? Other questions concern whether the type of

program portrayal/treatment makes any difference; developmentally, at what age do gender differences appear and disappear, and does it depend on the type of aggressive behavior?

METHOD

A. Selection and Retrieval

There are two criteria for study inclusion in this analysis. First, one needs information on the relationship between viewing television and antisocial and aggressive behavior. Second, there must be an original analysis of empirical data, however collected. Literature reviews, even when collating and displaying empirical data about that relationship from other sources, are excluded.

Studies come from five sources: (a) studies conducted before 1978 from Hearold's (1979, 1986) compilation; (b) post-1977 to November 29, 1989, studies obtained by a computerized literature search of the databases *ERIC* (Educational Resources Information Centers), *Psychological Abstracts, Dissertation Abstracts International, Sociological Abstracts*, and *Psychological Alert*; (c) the bibliographies of studies obtained in the aforementioned searches; (d) post-November 1989 journals, searched issue-by-issue, that produced pertinent studies in the earlier searches; and (e) the "invisible college", consulted for additional references (see Mullen, 1989).

As a result, more than half of the studies of this meta-analysis are post-1974, and more than a third are from the 1980s alone. Comparing the current data set with that of

Hearold, about 45 percent (85 studies) are post-Hearold. Both published (85 percent) and unpublished (15 percent) studies are included. Published studies are from journals, books, government documents, and technical reports. Unpublished studies are from dissertations/theses, conference papers, or ERIC documents. A complete list appears in Appendix A.

B. Coding

Some studies yield more than one comparison, mostly because more than one type of aggressive behaviors or television stimuli are employed. Within each study, separate effect sizes are calculated and treated as separate observations when (a) different types of aggressive behavior are assessed; (b) different measures are used to assess the same type of aggressive behavior; (c) different stimuli are used for treatment manipulation in the experimental design studies; and (d) different types of measures for television viewing are used in the correlational design studies. Such computation of more than one effect size from a single study creates some nonindependence in the data set, but such partitioning is necessary to extract the detailed information that permits us to address the questions that we would like to ask. As a result, from 186 studies, 1,087 comparisons are generated. However, when results based on a single effect size and multiple effect sizes from each study are compared as a means to test the legitimacy of using multiple effect sizes from a single study, it shows no threat to validity (Z_{Fisher} = .29, r = .28; Z_{Fisher} = .32, r = .31).

C. Effect Sizes and Significance Levels

For each comparison, the inferential statistics have been transformed into a common metrics of Z, one-tailed p for significance levels, and Z_{Fisher}, r, r^2, d for effect sizes. Z is characterized as having a mean of zero, a standard deviation of one, and directly associated with specified p values. The quantity r, ranges from -1.00, for perfect inverse relation, to 0.00 for no effect, to +1.00 for a perfect positive relation. Z_{Fisher}, a transformation of r, is calculated to solve the skewness of r at the extreme ends of the distribution (Mullen, 1989). The quantity d is the standardized difference between the means.

The statistical tests of effect sizes and significance levels are calculated by formulas described by Rosenthal and Mullen (Rosenthal, 1984; Mullen, 1989).

D. Magnitude

Adjectival description of the magnitude of effect size assists data interpretation. Cohen (1977) argues that r = .10 or d= .20 should be considered small; r = .30 or d = .50, medium; and r = .50 or d = .80, large. *A la* Cohen, in this study values of r below .20 will be described as small; if r is equal or smaller than .40 and larger than .20, medium; and if r is larger than .40, large.

E. Combinations and Comparisons

Once the statistics are transformed into the common metrics, meta-analytic combinations that represent aggregate study outcomes and comparisons that deal with variability around the combined study outcomes are derived. Diffuse comparison shows the

variability in the overall combined study outcome, while focused comparison gauges whether a particular predictor variable accounts for that variability. The "fail-safe numbers", the number of unretrieved studies with null results that would be needed to set aside the positive findings of the retrieved ones are calculated (Rosenthal, 1979). The formulae for numerical meta-analytic calculations are in Appendix B.

F. Reliability of Coding

The reliability of coding is measured by the level of agreement between the external coder and the results based on the coding instrument. The characteristics that are nominal are checked in terms of percentage of agreement between the external coder and this author. Overall, among items coded, 91 percent are coded identical. When a separate meta-analytic calculation for effect sizes and significance levels is performed from both coders' results, the results are very similar, being highly significant in medium magnitude of effect (Z_{Fisher} = 0.35, r = .34; Z_{Fisher} = 0.32, r = .31).

DATA

In this meta-analysis, 186 studies on the effects of television violence on aggressive behavior are analyzed and generate 1,087 comparisons representing a total of 244,346 viewers.

A. Gender

When studies are analyzed by the gender of the subjects they show a great

discrepancy in gender representation - 69 studies include males only, while five include females only. Among studies that sampled both sexes, 67 studies do not analyze the effects by gender while only 45 provide information on both sexes (Table A). The same pattern holds for comparison data - compared to male-only studies, which comprises more than one third of the comparisons, only six percent have female subjects, and more than a third do not provide separate information on female subjects for further analysis when studies included both females and males as their subjects.

Figure A shows a continuing failure to consider women in the studies from pre 1965 to the 1980s. In the 1970s research on the effects of media violence on aggressive behavior increased markedly, especially from 1970 to 1974. More than a third of the total studies appeared during this period due to the fact that in 1972 the final report of the Surgeon General's Scientific Advisory Committee on Television and Social Behavior and five supporting volumes of technical reports were published. Since then, but in decreased volume, a steady number of studies have been conducted on the same topic with a proportionate number of comparisons, with females as subject increasing to a similar level as that of the males.

Table A

Figure A

B. Gender and Age

The range of ages included in the studies varies widely from less than three to over 70. Most of the studies on the effects of television violence are conducted with children and adolescents from age six to 21, constituting more than 90 percent of the total. Male subjects dominate the studies throughout, and this is more apparent in studies with college students (Table B).

Table B

C. Research Design

When research design is considered, the underrepresentation of female subjects is apparent only in experimental design studies and not in correlational design studies (Table C). Most of the violent stimuli in the experimental design come from actual television programs or films. About half of the comparisons expose subjects to highly edited excerpts of violent programs, 20 percent expose them to entire programs and films, and 18 percent employ a brief sequence of specially created behavioral demonstrations (i.e., portrayals produced for use in research). Action-adventure programs are most frequently drawn on for the stimuli. In the correlational designs, television experience is measured predominantly by the frequency of watching programs identified as violent rather than amount of mere television viewing.

Table C

D. Aggressive Behavior Type

The kinds of aggressive behavior included range from severe forms of criminal behavior to minor forms of aggressive behavior by societal standards. About six percent of comparisons involve seriously harmful violence. The total for all forms of clearly illegal behavior is just under 10 percent. About forty percent represent self-reported aggression or performance on an aggression machine designed for certain experiments. Twenty percent represent interpersonal aggression involving hitting or pushing during play and social interaction.

RESULTS

The analysis of summary results emphasizes the type of research design, i.e., experimental or correlational. Experimental design explicitly models the causal relationship between viewer's exposure to television violence and aggressive behavior, while correlational design can merely establish the association between the two. A separate analysis by research design is required by this paradigmatic difference.

A. Overall Effect

The summary meta-analytic results are presented in Table D. Overall, the results show that those who score higher on exposure to portrayals of violence obtain higher scores on various types of aggressive behavior than those who do not. There is a highly significant positive association of medium magnitude by Cohen's (1977) criteria between greater degree

of exposure to a television portrayal of violence and aggressive behavior (Z_{Fisher} = 0.32, r = .31). The fail-safe numbers for 1,087 comparisons is 2,211,412, about 400 times Rosenthal's (1979, 1984) benchmark[1] - extremely robust in regard to the potential influence of unretrieved studies that could bring the combined results to a null effect. For experimental design studies, the average effect size for the relationship between exposure to television violence and aggressive behavior is medium in magnitude (Z_{Fisher} = 0.40, r = .38) and small for correlational designs (Z_{Fisher} = 0.19, r = .19). The fail-safe numbers for each research design are large enough to conclude that these outcomes are highly robust in regard to hypothetical unavailable null effect outcomes.

B. Gender Differences

The above summary results provide a clear picture of all observations, but at the same time miss variations within the data. To understand these variations - the extent of the spread around the overall effect sizes and significance levels - tests of heterogeneity are calculated. Based on diffuse comparisons of effect sizes and significance levels, for all comparison data included in the analysis, the individual studies are highly heterogeneous both in effect sizes (X^2 = 12813.82, p = .000000) and significance levels (X^2 = 12774.85, p = .000000). This indicates that there is considerable variability in the research domain. This heterogeneity logically leads to the next calculation of focus comparisons to see the relationship between gender and age of the viewer and viewing violence and aggressive

[1] Based on Rosenthal (1984)'s "5k + 10," the benchmark number for 1,087 comparisons is 5,445.

behavior. For all observations, significance levels and effect sizes turn out to be predictable in a systematic manner by gender ($Z = 3.42$, $p = .000309$; $Z = 6.16$, $p = 4.91E\text{-}10$) and age ($Z = 3.33$, $p = .000434$; $Z = 4.87$, $p = 5.69E\text{-}07$).

As shown in Table D when the magnitude of sex difference in aggressive behavior is compared, men are slightly stronger than women but in the same medium magnitude of effect ($Z_{Fisher} = 0.38$, $r = .37$; $Z_{Fisher} = 0.27$, $r = .26$). When the research design is taken into account, the slight difference in the magnitude of effect of aggressive behavior between men and women viewers disappears. This result - that women show equal magnitude of effect of aggression from violent programs despite the gender bias in selection of subjects and respondents, which could inevitably lead to more compelling data for men - should merit attention.

Table D

C. Gender and Age Differences

To understand the effects of gender difference in age development, viewers are grouped into five age categories - preschool children (5 years or less), primary school children (6 to 11 years), high school students (12 to 17 years), college students (18 to 21 years), and adults (above 22 years old). Table E shows a pattern where the magnitude of effect is somewhat inversely related to age. The magnitude is large for preschool children, medium for primary and high school students, and small for adults. For children, from preschool to 11 years, boys are more aggressive than girls. But boys' responses of

aggressive behavior drops around the age of 12 to 17 while girls' antisocial behaviors remain steady. In their teens (i.e., 12 to 17 year), females show somewhat stronger effects of aggression as a result of watching television programs than do males. From college on, the gender difference diminishes.

Table E

D. Program Portrayal and Viewer Characteristics

Program Type

Magnitude of effect varies by program type. Table F indicates that the magnitude of effect for cartoon/fantasy programs is large for both boys and girls (Z_{Fisher} = 0.53, r = .48; Z_{Fisher} = 0.55, r = .50). This result conflicts with the argument that cartoons are not harmful to the viewers because they are unrealistic; it supports the argument that even non-realistic content such as cartoons may be harmful for young children who do not make careful distinctions between fantasy and reality. Smaller but large in magnitude of effect are found for studies that used behavioral demonstration for exposure for both boys and girls (Z_{Fisher} = 0.56, r = .51; Z_{Fisher} = 0.45, r = .42). For adventure/detective/crime type of programs men show a stronger magnitude of influence than do women (Z_{Fisher} = 0.40, r = .38; Z_{Fisher} = 0.30, r = .29).

Table F

Program Portrayal Condition

The program content used in the experimental design studies are categorized in one of four groups: (a) *efficacy* (reward or lack of punishment); (b) *normativeness* (justified, consequenceless, intentionally hurtful, physical violence); (c) *pertinence* (commonality of cues, similarity to the viewer); and (d) *susceptibility* (pleasure, anger, frustration, absence of criticism). Among these, the pertinence factor is the only condition that has a sufficient number of studies on female subjects for the analysis. Table G shows a slightly higher magnitude of effect when viewers identify with the perpetrator of the aggressive behavior or when the weapon or object in the program portrayal is common to the viewer. There is no difference in the magnitude of effect between men and women when the program is pertinent to the viewer. The only difference occurs when the program is not pertinent to the viewer in which women show somewhat smaller effect sizes but still in a medium magnitude range (Z_{Fisher} = 0.44, r =u .41; Z_{Fisher} = 0.30, r = .29). Unlike the general notion, program portrayal conditions do not make much difference on the effect sizes; this could be due to the difficulty in discerning with whom the viewer identifies - whether it is the victim or perpetrator, or whether they feel animosity or sympathy toward the victim. Whatever heightens the effects of these conditions would depend on the viewer's perception of the media content.

Table G

D. Types of Aggressive Behavior

In this study, the antisocial behaviors range from seriously harmful and criminal behavior to minor forms of interpersonal aggression and aggression against toys. For meta-analytic calculations, aggressive behaviors have been subdivided into three categories: illegal activities, minor aggressive behaviors, and simulated aggressive behaviors. Illegal activities include criminal violence against a person, grand theft, or burglary which is a minor form of grand theft; minor aggressive behaviors include physical violence against a person not in the range of criminal behavior, verbal aggression, or physical violence against an object; simulated aggressive behaviors include intensity of using aggression machines to deliver electric shock or other noxious stimuli, intention of performing an aggressive act, or playing with aggressive toys. Only a few studies provide comparisons involving criminal violence or otherwise illegal activities. However, there is no justification for analyzing illegal activities for female viewers since the number of studies is too small for analysis, and the fail-safe numbers indicates that the result could easily change if new studies were included.

Gender Differences

The gender differences for various kinds of aggressive behavior show that the magnitude of effect is larger for men than for women, but both in the medium range of (Table H). For simulated aggression both male and female viewers show a medium magnitude of effect (Z_{Fisher} = 0.39, r=.37; Z_{Fisher} = 0.28, r=.27) and for minor aggression males show a large while females show a medium magnitude of effect (Z_{Fisher} = 0.41, r=.39; Z_{Fisher} = 0.26, r=.26).

Table H

Figure B is the effect size of aggressive behavior plotted against gender and age. The analysis indicates a somewhat negative association between the age of the subject and magnitude of aggressive behavior for both genders. The trend for gender differences is larger among younger children and smaller among the older subjects, generally college students and adults. For both men and women a large magnitude of effect is found among preschool children, and medium to large among college students and adults. Boys continue to show a noticeable drop in aggressive behavior as a result of watching television programs throughout their early teens but regain some, but not all, in the college years. Girls' aggressive behavior decreases through their early school days (i.e., 6 to 11 years) but regain the same magnitude of effect in their college years.

Figure B

In Figure C and D, different types of aggressive behavior are further analyzed. For preschool children, girls show a stronger effect size for simulated aggressive behavior than do boys (Z_{Fisher} = 0.41, r=.39; Z_{Fisher} = 0.19, r=.19). Boys' aggression level consistently rises throughout their adult years while for girls the curve drops noticeably during their early teens (12 to 17 years) and again during their adult years (22 years and above). For minor

aggressive behavior both boys' and girls' antisocial behavior drops with age, while boys show a stronger magnitude of effect due to television violence than girls show.

Figure C

Figure D

DISCUSSION AND CONCLUSION

This study examines the empirical evidence on gender differences in the influence of exposure to violent television portrayals of antisocial and aggressive behavior. Most of the studies on the effects of television violence on antisocial behavior have been conducted with young boys and male college students. The current meta-analysis indicates that this emphasis on male subjects has been misplaced. The meta-analysis shows that gender differences in aggressive behavior are not large. Effect size is consistently positive for both genders, with any interaction favoring males confined to experimental designs within the same magnitude range; effect size for correlational designs is essentially identical for men and women.

Regardless of the gender and age - whether nursery school, elementary school, college age, or adult - results of the analysis remain positive with effect sizes from small to large in magnitude. Among preschoolers gender differences are larger than among college students or adults. This suggests that violent television programs continue to influence both

men and women after childhood.

Effect size is uniformly positive when type of behavior is taken into account (i.e., simulated aggression, minor interpersonal aggression), although the gender bias in selection of subjects and respondents inevitably leads to more compelling data for males. The introduction of significance levels and fail-safe *N*s indicates that these results are extremely robust. Significance is typically high, and the number of additional null results that would be necessary to alter the pattern are often enormous.

The data of the past two decades and a half show that television violence increases aggressive and antisocial behavior but challenges the widely held view that males are more susceptible than females to television and film violence. To further understand the conditions under which both men and women learn aggressive behavior as a result of watching television, female subjects should no longer be continuously excluded from research. The implication of this study is that females merit equal attention with men in this area of inquiry and theory construction, and merit equally any related social concerns.

Tables and Figures

Table A Gender Information: Studies

Gender	Number of Studies(%)	Number of Comparisons(%)
Female only	5(2.7)	63(5.8)
Male only	69(37.7)	378(34.8)
Both Sex - Information		
Differentiated	45(24.6)	254(23.4)
Undifferentiated	67(35.0)	392(36.1)
Total	186(100.0)	1087(100.0)

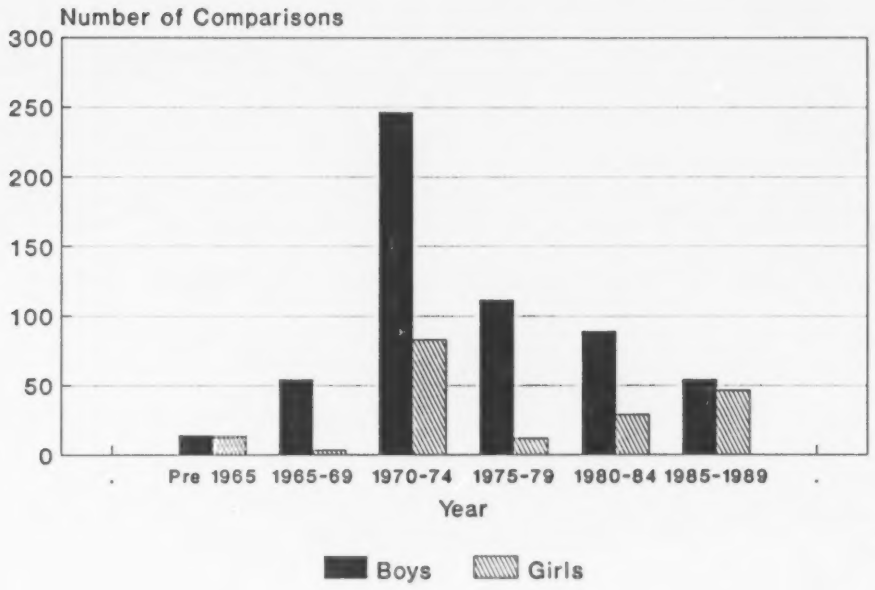


Figure A. Publication Year and Gender

Table B Comparisons by Viewer Age and Gender

Age	Total	Male only	Female only	Both gender
	Number of Comparisons(%)	Number of Comparisons(%)	Number of Comparisons(%)	Number of Comparisons(%)
Pre School	104 (9.6)	47 (4.3)	21 (1.9)	36 (3.3)
6-11	333 (30.6)	130 (12.0)	89 (8.2)	114 (10.5)
12-17	326 (30.0)	152 (14.0)	57 (5.2)	117 (10.8)
18-21 (College)	254 (23.4)	226 (20.8)	17 (1.6)	11 (1.0)
Adult	54 (5.0)	13 (1.2)	2 (0.2)	39 (3.6)
No Age Information	16 (1.5)	-	-	16 (1.5)
Total	1087 (100.0)			1087 (100.0)

Note: - : no observation

Table C Comparisons by Gender and Research Method

	Total	Male only	Female only	Both gender
Method	Number of Comparisons(%)	Number of Comparisons(%)	Number of Comparisons(%)	Number of Comparisons(%)
Experimental Design	684(62.9)	428(39.4)	66(6.1)	190(39.4)
Laboratory Experiment	551(50.7)	377(34.7)	61(5.6)	113(10.4)
Time Series	49(4.5)	0(0)	0(0)	49(4.5)
Field Experiment	77(7.1)	44(4.1)	5(0.5)	28(2.6)
Field Study	7(0.6)	7(0.6)	0(0)	0(0)
Correlational Design	403(37.1)	140(12.9)	120(11.0)	143(13.2)
Survey	403(37.1)	140(12.9)	120(11.0)	143(13.2)
Total	1087(100.0)	568(52.3)	186(17.1)	333(30.6)

Table D Effect Sizes and Significance Levels by Gender

Effect Sizes	Z_{Fisher}	r	r^2	d
Overall				
All Observations Combined	0.32	.31	.10	0.65
Experimental Studies	0.40	.38	.14	0.81
Correlational Studies	0.19	.19	.04	0.38
Male Viewers				
All Observations Combined	0.38	.37	.13	0.79
Experimental Studies	0.45	.42	.18	0.93
Correlational Studies	0.18	.18	.03	0.37
Female Viewers				
All Observations Combined	0.27	.26	.07	0.54
Experimental Studies	0.41	.39	.15	0.84
Correlational Studies	0.19	.19	.03	0.38

Significance Levels	N	Z	p[a]	Fail-Safe N
Overall				
All Observations Combined	1087	74.22	.000000	2211412
Experimental Studies	684	49.09	.000000	608541
Correlational Studies	403	57.93	.000000	499330
Male Viewers				
All Observations Combined	568	48.27	.000000	488519
Experimental Studies	428	41.79	.000000	275852
Correlational Studies	140	24.15	.000000	30040
Female Viewers				
All Observations Combined	186	23.68	.000000	38351
Experimental Studies	66	11.51	3.27E-25	3167
Correlational Studies	120	20.94	.000000	19326

[a] p = .000000 is $p < 1.0*10^{-41}$
p = 3.94E-40 is $p = 3.94*10^{-40}$

Table E Effect Sizes and Significance Levels by Age and Gender

Age		Gender		
		Male	Female	Both
Pre school	N	47	21	36
	Z	17.17	8.63	11.03
	p	4.45E-39	6.09E-17	.22E-24
	Fail-safe N	5073	557	1583
	Fisher's Z	0.68	0.41	0.34
	r	.59	.40	.32
	r^2	.34	.15	.11
	d	1.47	0.85	0.69
6 - 11	N	130	89	114
	Z	27.63	16.69	21.03
	p	.000000	4.96E-38	.000000
	Fail-safe N	36557	9071	18522
	Fisher's Z	0.39	0.27	0.28
	r	.37	.26	.28
	r^2	.14	.07	.08
	d	0.80	0.54	0.58
12 - 17	N	57	152	117
	Z	12.66	22.87	51.76
	p	2.65E-28	.000000	.000000
	Fail-safe N	3318	29228	115720
	Fisher's Z	0.17	0.27	0.19
	r	.17	.26	.19
	r^2	.02	.07	.04
	d	0.34	0.54	0.38
18 - 21	N	226	17	11
	Z	27.60	6.97	6.34
	p	.000008	3.36E-12	1.67E-10
	Fail-safe N	63391	288	152
	Fisher's Z	0.40	0.41	0.26
	r	.38	.39	.25
	r^2	.15	.15	.06
	d	0.83	0.85	0.53
Adult (22 Above)	N	13	2[1]	39
	Z	5.76	1.17	12.04
	p	5.04E-09	.120217	1.22E-26
	Fail-safe N	146	-.98	2049
	Fisher's Z	0.29	0.31	0.15
	r	.28	.29	.15
	r^2	.07	.09	.02
	d	0.59	0.62	0.30

[1] Not enough number of studies for meaningful interpretation.

Table F Effect Sizes and Significance Levels by Program Type and Gender

Program Type		Gender	
		Male	Female
Adventure - Crime/Detective	N	88	22
	Z	20.15	8.49
	p	4.20E-45	1.55E-16
	Fail-safe N	13111	564
	Fisher's Z	0.40	0.30
	r	.38	.29
	r^2	.14	.01
	d	0.82	0.61
Cartoon/Fantasy Program	N	10	10
	Z	5.3	4.06
	p	6.61E-08	2.51E-05
	Fail-safe N	93	51
	Fisher's Z	0.53	0.55
	r	.48	.50
	r^2	.23	.25
	d	1.10	1.16
News/Public Affairs	N	39	8[1]
	Z	12. 1	2.82
	p	9.39E-27	.0023
	Fail-safe N	2063	15
	Fisher's Z	0.33	0.26
	r	.32	.26
	r^2	.10	.07
	d	0.67	0.53
Pornography	N	65	2[1]
	Z	14.86	3.09
	p	7.91E-34	0.001
	Fail-safe N	5235	5
	Fisher's Z	0.47	0.55
	r	.44	.50
	r^2	.19	.25
	d	0.97	1.15

Table F Continues

Table F Continued

Program Type		Gender	
		Male	Female
Behavioral Demonstration	N	119	21
	Z	25.42	8.59
	p	0	7.97E-17
	Fail-safe N	28297	551
	Fisher's Z	0.56	0.45
	r	.51	.42
	r^2	.26	.18
	d	1.18	0.93

[1] Not enough number of studies for meaningful interpretation, and the fail-safe numbers indicates that the result could easily change if new studies are included.

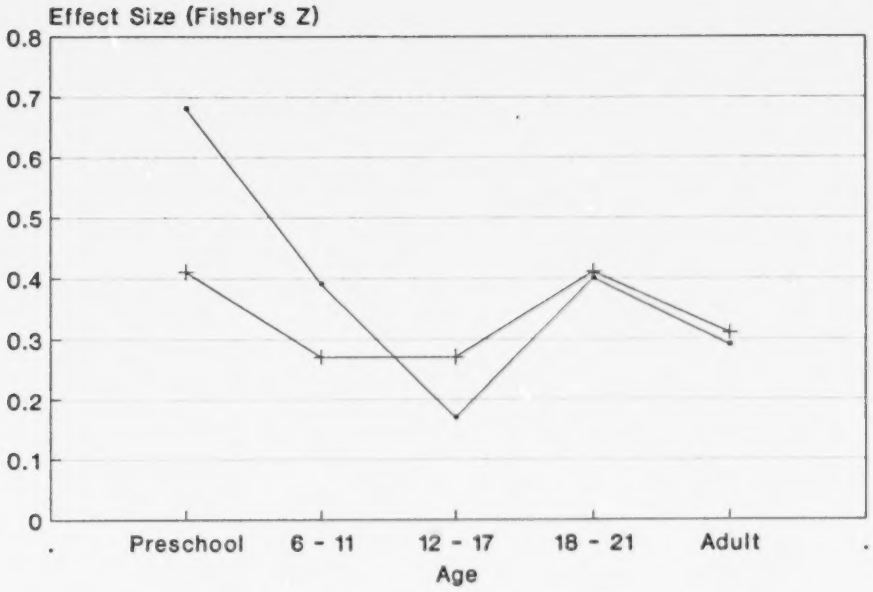
Table G Effect Sizes and Significance Levels by Gender and Program Portrayal Condition

Portrayal Condition		Gender	
		Male	Female
Pertinent to - perpetrator, weapon/object, setting	N	142	134
	Z	29.33	27.02
	p	0	0
	Fail-safe N	44998	36027
	Fisher's Z	0.46	0.45
	r	.43	.42
	r^2	.18	.18
	d	0.94	0.92
Not Pertinent	N	71	16
	Z	16.3	4.87
	p	3.44E-37	5.84E-07
	Fail-safe N	6908	124
	Fisher's Z	0.44	0.30
	r	.41	.29
	r^2	.17	.08
	d	0.91	0.61

Table H Effect Sizes and Significance Levels by Gender and Types of Aggressive Behavior

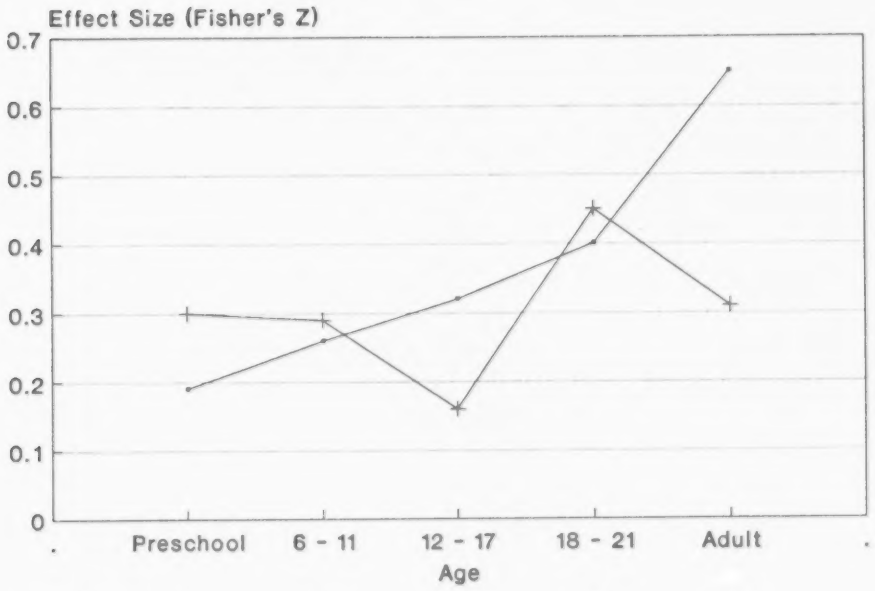
Gender		Types of Aggressive Behavior		
		Simulated Aggression	Minor Aggression	Illegal Activities
Female	N	76	104	6[1]
	Z	13.05	19.96	2.28
	p	2.53E-29	9.81E-45	.01
	Fail-safe N	4705	15214	6
	Fisher's Z	0.28	0.26	0.17
	r	.27	.26	.17
	r^2	.08	.07	.03
	d	0.57	0.53	0.34
Male	N	346	201	21
	Z	32.98	35.83	6.32
	p	.000000	.000000	.000000
	Fail-safe N	138759	95148	288
	Fisher's Z	0.39	0.41	0.09
	r	.37	.39	.09
	r^2	.14	.15	.01
	d	0.80	0.84	0.18

[1] Not enough number of studies for meaningful interpretation, and the fail-safe numbers indicates that the result could easily change if new studies are included.



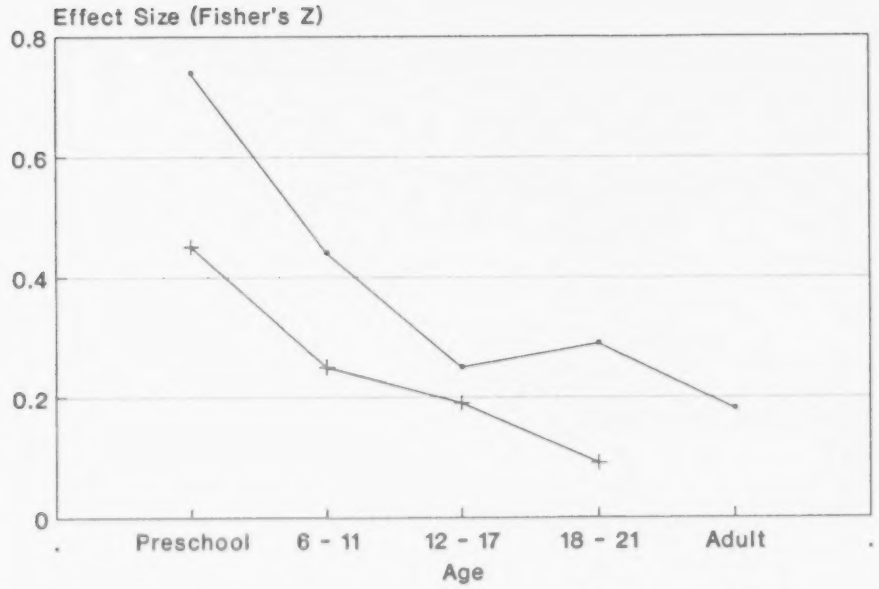
-.-	Boys	ZFisher	.69	.39	.17	.40	.29
		N	47	130	57	226	13
-+-	Girls	Zfisher	.41	.27	.27	.41	.31
		N	21	89	152	17	2
	Mixed	Zfisher	.34	.28	.19	.27	.15
	Group	N	36	114	117	11	39

Figure B. Overall Aggressive Behavior by Gender and Age



-.-	Boys	ZFisher	.19	.26	.32	.40	.65
		N	30	27	74	222	3
-+-	Girls	Zfisher	.30	.29	.16	.45	.31
		N	5	29	25	15	2
	Mixed	Zfisher	.41	.29	.18	.30	.33
	Group	N	19	56	55	4	2

Figure C. Simulated Aggressive Behavior by Gender and Age



-.-	Boys	ZFisher	.74	.44	.25	.29	.18
		N	27	96	65	3	10
-+-	Girls	ZFisher	.45	.25	.19	.09	--
		N	16	56	30	2	--
	Mixed	ZFisher	.26	.28	.20	.13	.14
	Group	N	17	58	47	5	5

Note: -- has no observation in this category.

Figure D. Minor Aggressive Behavior by Gender and Age

APPENDIX A

STUDIES CODED FOR THE META-ANALYSIS

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APPENDIX B

FORMULA FOR META-ANALYTIC CALCULATION

Combination of significance levels:

$$Z = (\Sigma W_j Z_j) \; / \; (\Sigma W_j^2)^{1/2},$$

Combination of effect sizes:

$$Z_{Fisher} = (\Sigma W_j Z_{Fisher}) \; / \; (\Sigma W_j),$$

Fail-safe numbers:

$$Nfs \; (p=.05) = (\Sigma Z_j \; / \; 1.645)^2 - k$$

Diffuse comparison of significance levels:

$$X^2_{(k-1)} = \Sigma (Z_j - \bar{Z})^2,$$

Diffuse comparison of effect sizes:

$$X^2_{(k-1)} = \Sigma (N_j - 3)(Z_{Fisher} - \bar{Z}_{Fisher})^2,$$

Focused comparison of significance levels:

$$Z = (\Sigma \sqrt{\backslash_j} Z_j) \; / \; (\Sigma \sqrt{\backslash_j}^2)^{1/2},$$

Focused comparison of effect sizes:

$$Z = (\Sigma \sqrt{\backslash_j} Z_{Fisherj}) \; / \; ((\Sigma \sqrt{\backslash_j}^2) \; / \; (N_j - 3))^{1/2},$$

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